ONTARIO MINISTRY OF ENVIRONMENT
36936000024944

BIOGEOCHEMISTRY PROJECT:
SNOW CORES 1988-1989
PLASTIC LAKE, HARP LAKE, HAWKEYE LAKE

DECEMBER 1989

Environment
Ontario

Jim Bradley
Minister

ISBN:0-7729-6282-0

BIOGEOCHEMISTRY PROJECT:
SNOW CORES 1988-1989
PLASTIC LAKE, HARP LAKE, HAWKEYE LAKE

(Data Report 89/1)

Report prepared by:
J.G. Findeis, B.D. LaZerte and L.D. Scott

WATER RESOURCES BRANCH
Dorset, Ontario

DECEMBER 1989

RECYCLABLE

Copyright: Queen's Printer for Ontario, 1989
This publication may be reproduced for non-commercial purposes
with appropriate attribution.

ABDH
[illegible]

PREFACE

The Data Report series is intended as a readily available source of basic data collected for lakes and watersheds in the Muskoka-Haliburton area of Ontario. These data were collected as part of the Acid Precipitation in Ontario study.

The Acid Precipitation in Ontario Study (1979 - present) was initiated, in part, to investigate the effects of the deposition of strong acids on aquatic and terrestrial ecosystems in Ontario. The primary findings of these studies have been and will continue to be published as reviewed papers and technical reports.

ABSTRACT

Snow was collected and analysed as part of the Biogeochemistry program to determine the chemical and hydrological inputs to groundwater flow in three watersheds. This data report summarizes 1988 and 1989 chemistry data as well as depth and water equivalence of the snow pack. Meteorological data (temperature and precipitation) is also presented for the three watersheds.

TABLE OF CONTENTS

I Methods Page

1. Snow sampling 1
2. Meteorological Data 3
3. Snow tables 4

II List of Figures

1. Maps of Study Areas 2
2. Chemistry Results 5-22
3. Temperature, Precipitation, Snow Depth and Water Equivalence 23-68

III List of Tables

1. Snow Depth and Water Equivalence of Individual Sampling Sites 69-85

LIST OF FIGURES

Maps of Watersheds Showing Sampling Sites

Page

1. Plastic Lake subwatershed 1-08 ________ 2
2. Harp Lake subwatershed 4-21 ________ 2
3. Hawkeye Lake subwatershed ________ 2

4. Conversion of field weight measurement to metric units ________ 2

Chemistry Results

5. Chemistry results at Plastic ________ 5-10
6. Chemistry results at Harp ________ 11-16
7. Chemistry results at Hawkeye ________ 17-22

Temperature, Precipitation, Snow Depth and Water Equivalence of Snow Pack

8. Mean of six stations at Plastic ________ 23-24
9. Station PCST16 - Plastic ________ 25-26
10. Station PCST14 - Plastic ________ 27-28
11. Station PCST11 - Plastic ________ 29-30
12. Station PCSZ07 - Plastic ________ 31-32
13. Station PCSZ05 - Plastic ________ 33-34
14. Station PCSZ04 - Plastic ________ 35-36
15. Mean of six stations at Harp ________ 37-38
16. Station HPST16 - Harp ________ 39-40
17. Station HPST14 - Harp ________ 41-42
18. Station HPST13 - Harp ________ 43-44
19. Station HPSZ07 - Harp ________ 45-46
20. Station HPSZ06 - Harp ________ 47-48
21. Station HPSZ04 - Harp ________ 49-50

LIST OF FIGURES (cont'd)

Page

22. Mean of five stations at Hawkeye 51-53
23. Station HKSBW - Hawkeye 54-56
24. Station HKSFB - Hawkeye 57-59
25. Station HKSPO - Hawkeye 60-62
26. Station HKSPW - Hawkeye 63-65
27. Station HKSSB - Hawkeye 66-68

LIST OF TABLES

Detailed Tables of Snow Depth and Water Equivalence at:

Page

1. Site PCST16 - Plastic 69
2. Site PCST14 - Plastic 70
3. Site PCST11 - Plastic 71
4. Site PCSZ07 - Plastic 72
5. Site PCSZ05 - Plastic 73
6. Site PCSZ04 - Plastic 74
7. Site HPST16 - Harp 75
8. Site HPST14 - Harp 76
9. Site HPST13 - Harp 77
10. Site HPSZ07 - Harp 78
11. Site HPSZ06 - Harp 79
12. Site HPSZ04 - Harp 80
13. Site HKSBW - Hawkeye 81
14. Site HKSFB - Hawkeye 82
15. Site HKSPO - Hawkeye 83
16. Site HKSPW - Hawkeye 84
17. Site HKSSB - Hawkeye 85

METHODS

Snow sampling

Snow was collected at each of six sites in the Plastic 1 (Fig. 1) and Harp 1 (Fig. 2) watersheds and at five sites in the Hawkeye Lake (Fig. 3) (Thunder Bay District) watershed. Sites were located adjacent to groundwater collection sites with inclinations similar to these sites.

To determine water equivalence of the snowpack, three samples were taken from a previously undisturbed section of each site. A Utah metal snow corer (7 cm. I.D.) was pushed through the snowpack to the ground. At the Hawkeye Lake sites the snow depth was recorded and the snow cores were placed into plastic bags, returned to the laboratory and weighed on a Mettler 16 kg. balance. At the Dorset sites (Harp and Plastic) snow depth was recorded and the samples weighed at the site using the "red scale" on the Utah spring scale. Weight in grams was calculated using the formula: (grams = 654.3 + 88.23 * U) where U= Red scale on the Utah scale.(Fig. 4)

Snow was collected for chemical analysis from each site using a clean plexiglass coring tube with an inside diameter of 10.16 cm. A sufficient number of snow cores were collected to provide approximately two litres of water for chemical analysis. The number of cores collected depended on the depth of the snow at the sampling site. Samples were put into clean plastic bags, melted, then poured into bottles for submission to the chemistry lab.

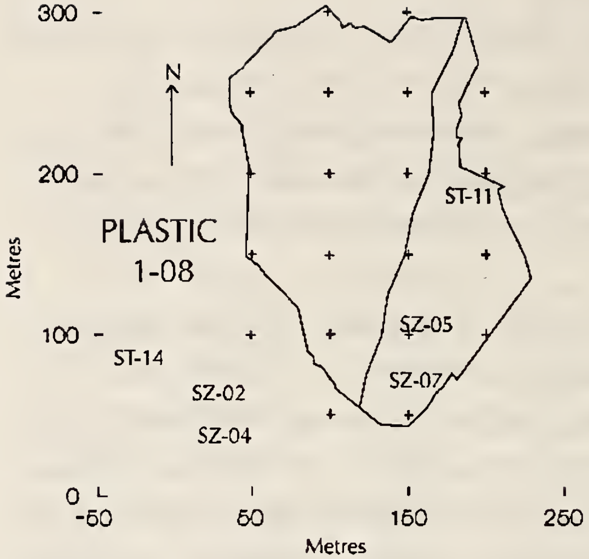


Figure 1

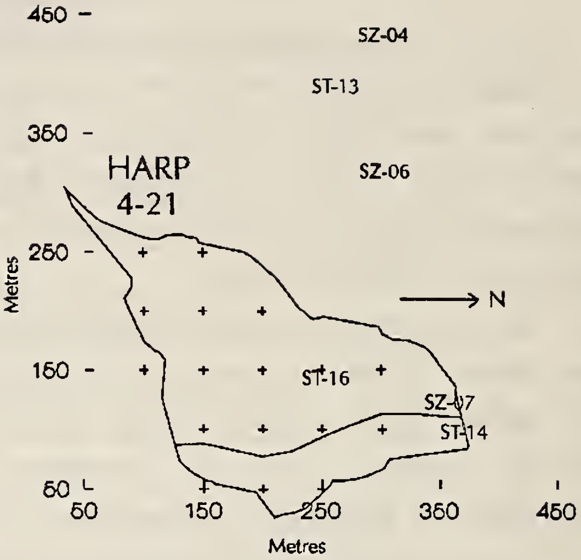


Figure 2

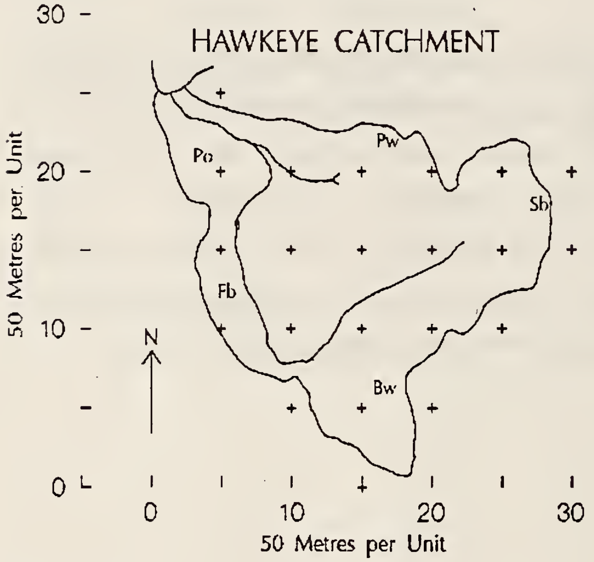


Figure 3

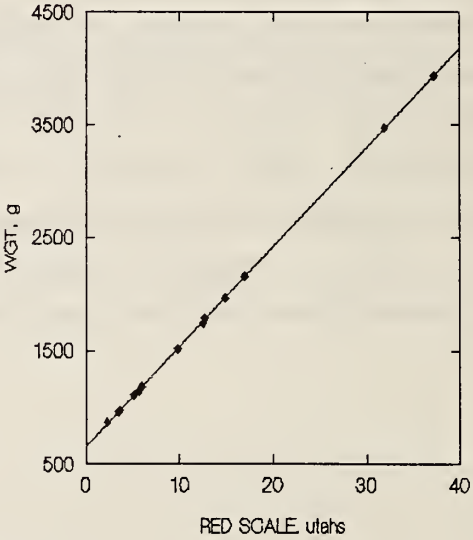


Figure 4

Meteorological data

Daily precipitation and temperature data was collected at meteorological stations located within one kilometre of the collection sites at Hawkeye Lake and Plastic Lake. The Harp Lake meteorological site is located approximately one and a half kilometres from the collection sites. A Belfort model 5915 Rainfall Transmitter connected to a Campbell Scientific model 21X Micrologger was used to record precipitation. Daily precipitation values (water equivalence during snowfall events) were calculated from the hourly readings recorded by the data logger. A Campbell Scientific model 207-C temperature probe, also connected to the 21X Micrologger was used to determine maximum, minimum and mean daily temperatures from hourly readings. Precipitation was considered to be in the form of snow if the mean daily temperature was less than or equal to one degree Centigrade.

The Belfort gauge located at Plastic Lake was not in operation from Feb 11 1988 to May 16 1988. Since daily precipitation values were not available, values were estimated using a regression model with data collected at the Paint and Heney lakes meteorological stations.

Daily temperature data was not available from the Harp lake meteorological station for several days in 1988 (Jan 21-23, Feb 7-11, Feb 18, Mar 1, Mar 2, Mar 6 and Apr 4). This data was obtained from the Heney lake site as this was the site closest to the Harp lake site. Hourly data from the Hawkeye Lake meteorological station was not available from February 15, 1988 to April 13, 1988. Instead, data from daily maximum/minimum readings was used to compute averages. This data was collected at the Hawkeye Lake meteorological site during week days (Monday to Friday) and at the Thunder Bay Airport on Saturdays and Sundays. Mean daily temperatures during this time period are calculated from a single daily maximum and minimum temperature reading, rather than the hourly readings from the data logger.

Snow tables

Tables 1 through 17 show snow depths and water equivalence of the snow collected at each of the seventeen sites. Three cores were taken at each sampling site during each visit. Mean values and standard deviation are shown for each collection. A visual estimate of snow cover was made during each visit. If snow cover was less than 100% snow depth and water equivalence values were adjusted by multiplying by the percent coverage. Locations of the sampling sites can be found on figures 1 to 3.

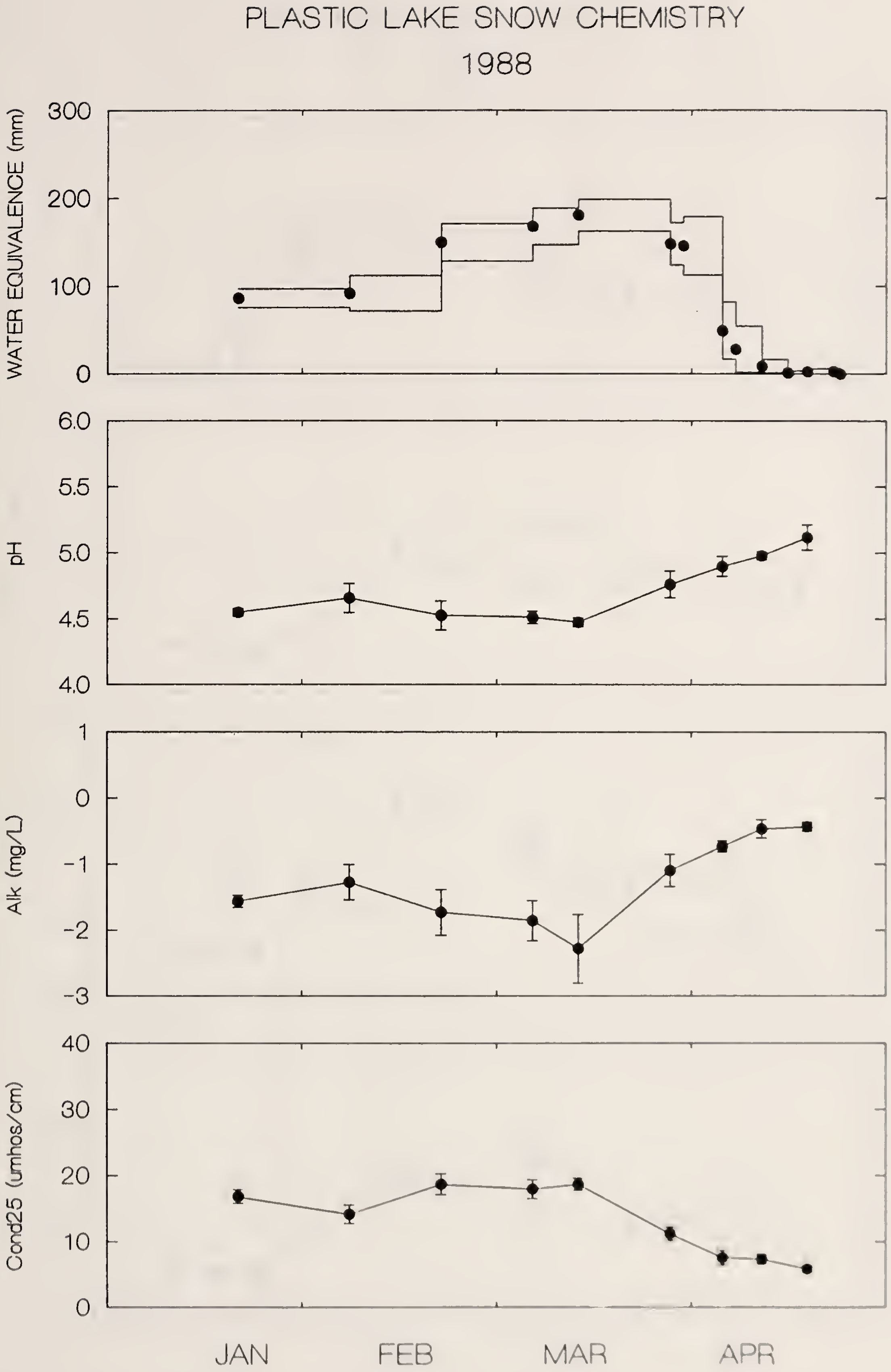

PLASTIC LAKE SNOW CHEMISTRY
1988
WATER EQUIVALENCE (mm)
300
200
100
0
pH
6.0
5.5
5.0
4.5
4.0
Alk (mg/L)
1
0
-1
-2
-3
Cond25 (umhos/cm)
40
30
20
10
0
JAN
FEB
MAR
APR

Figure 3

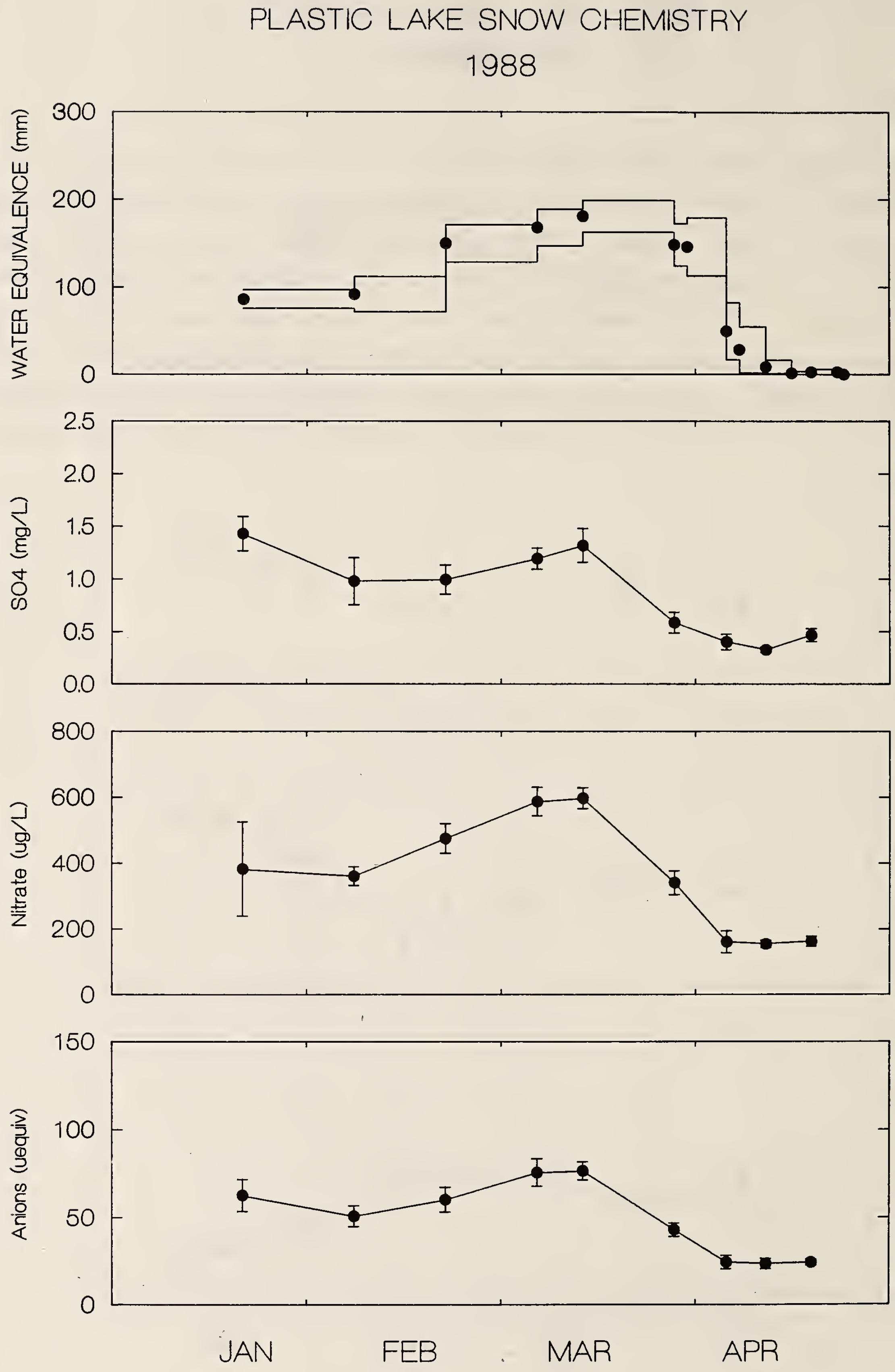


Figure 5 (cont'd)

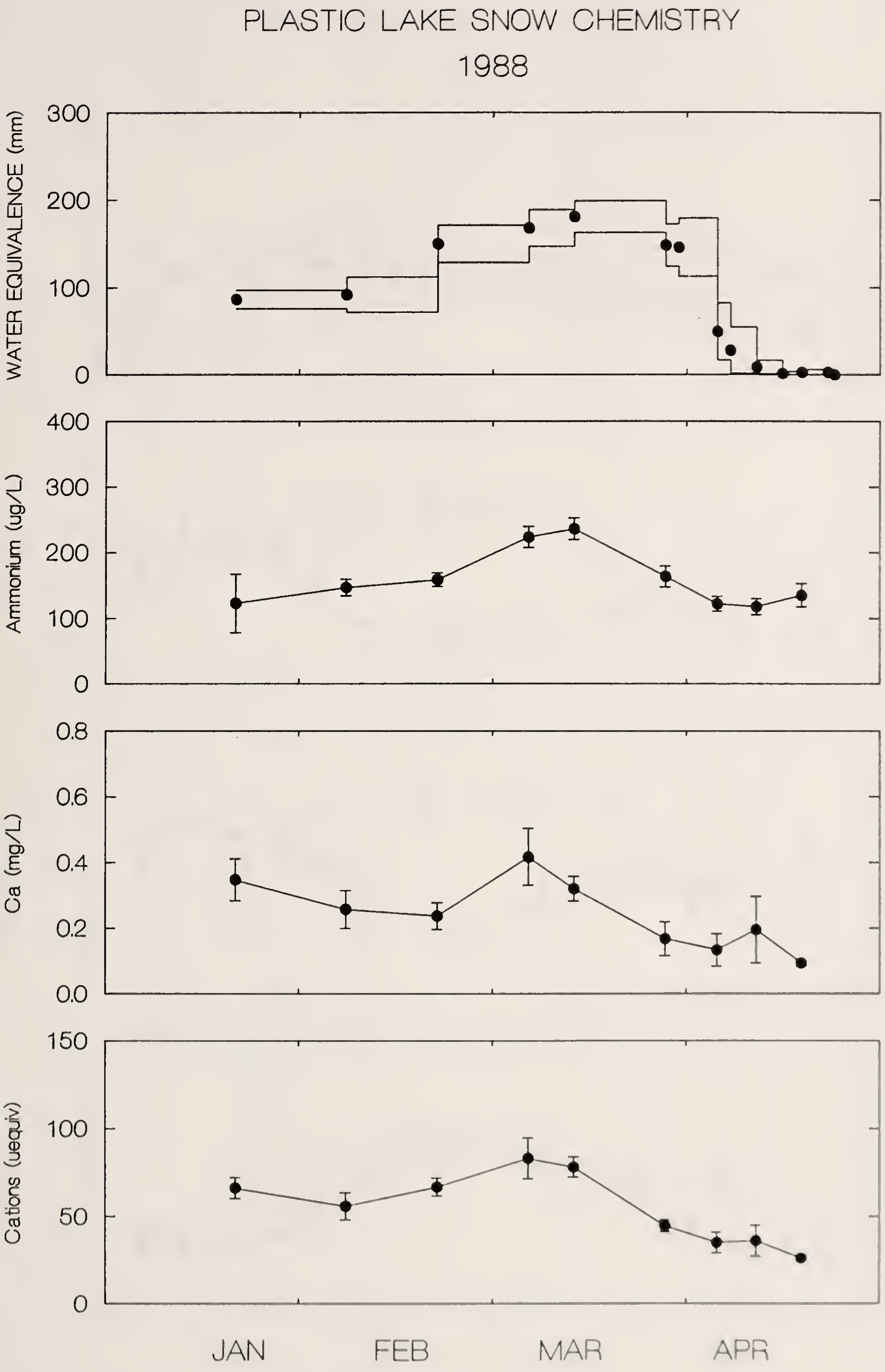


Figure 5 (cont'd)

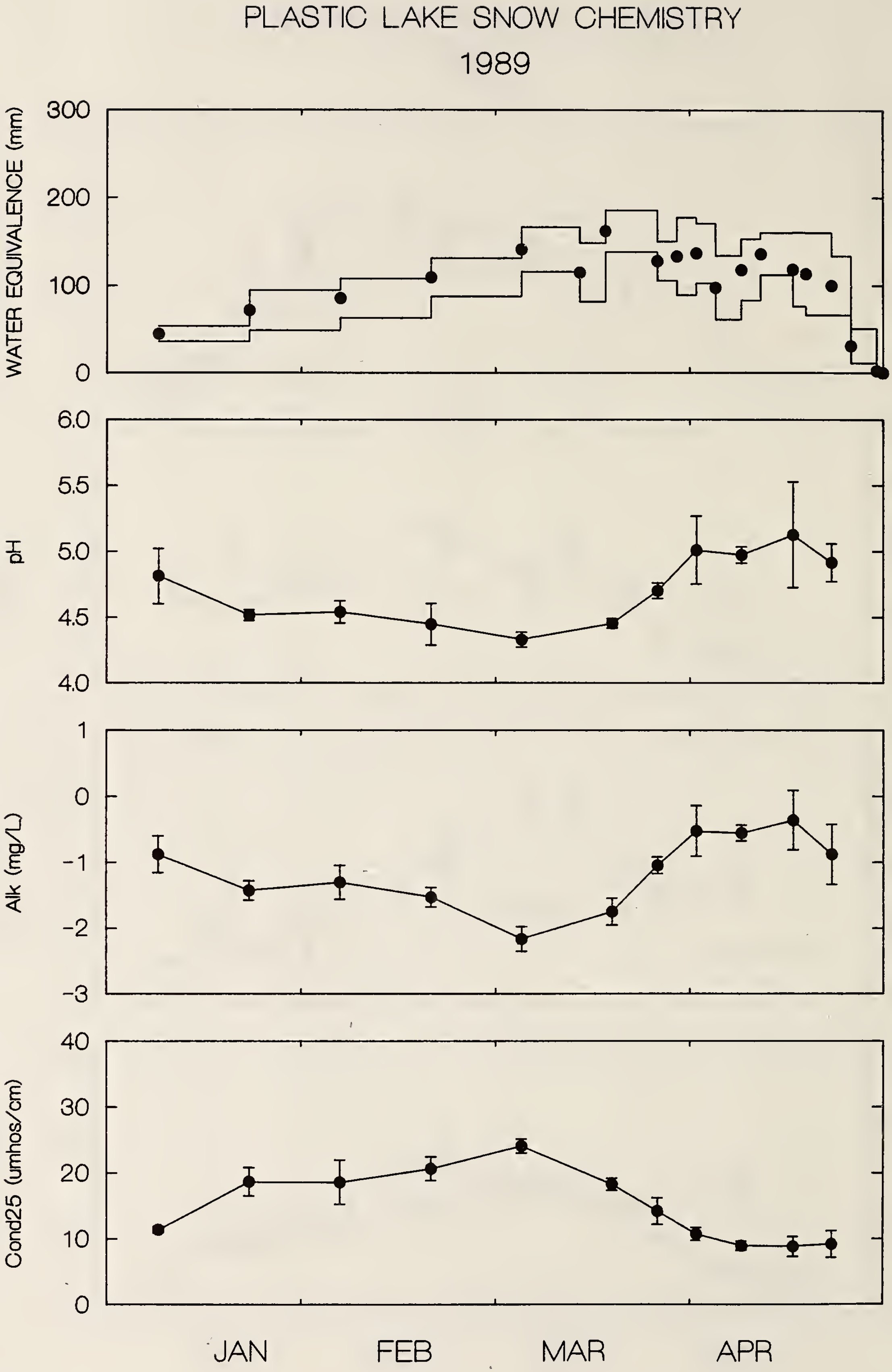


Figure 5 (cont'd)

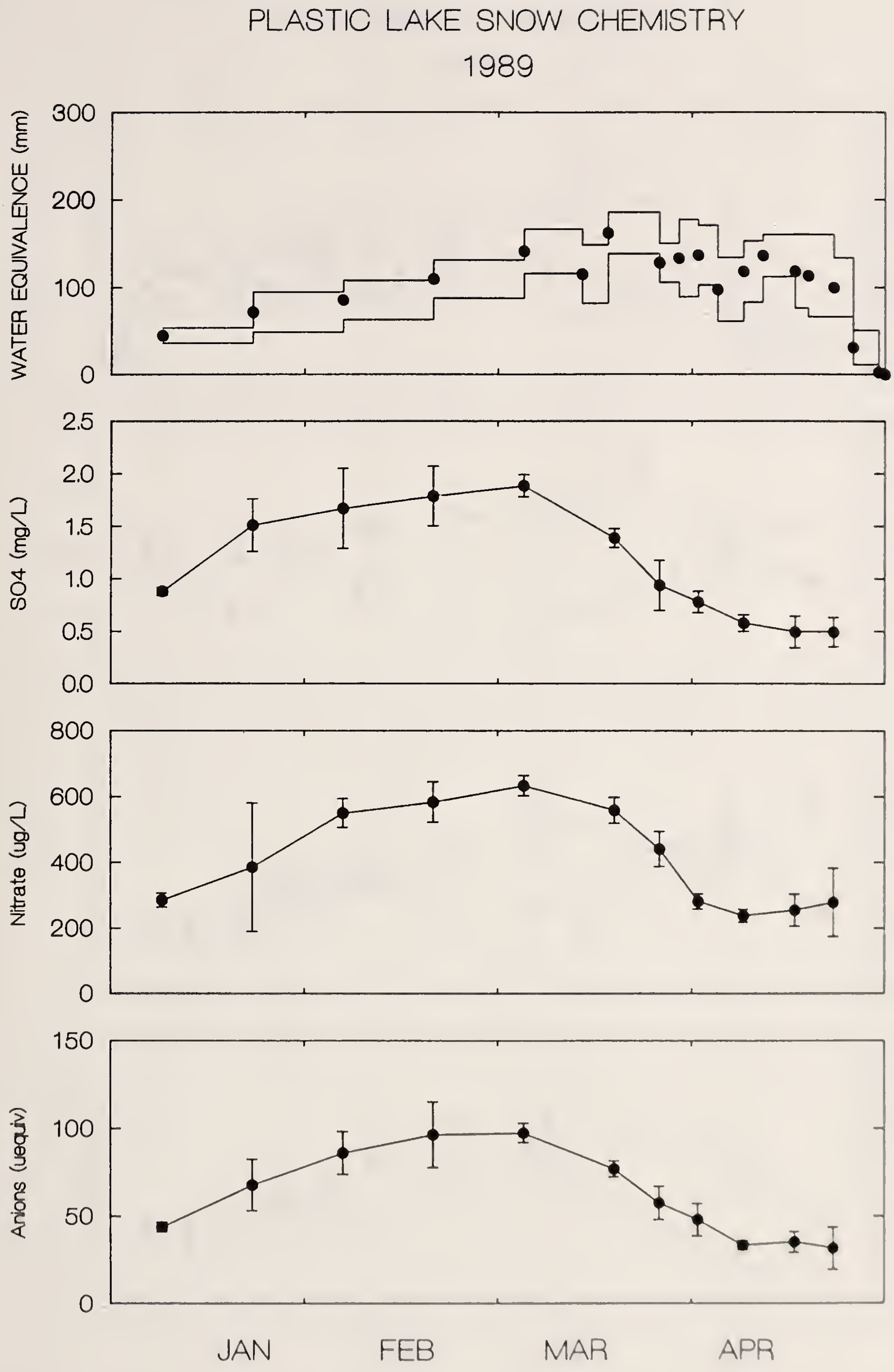


Figure 5 (cont'd)

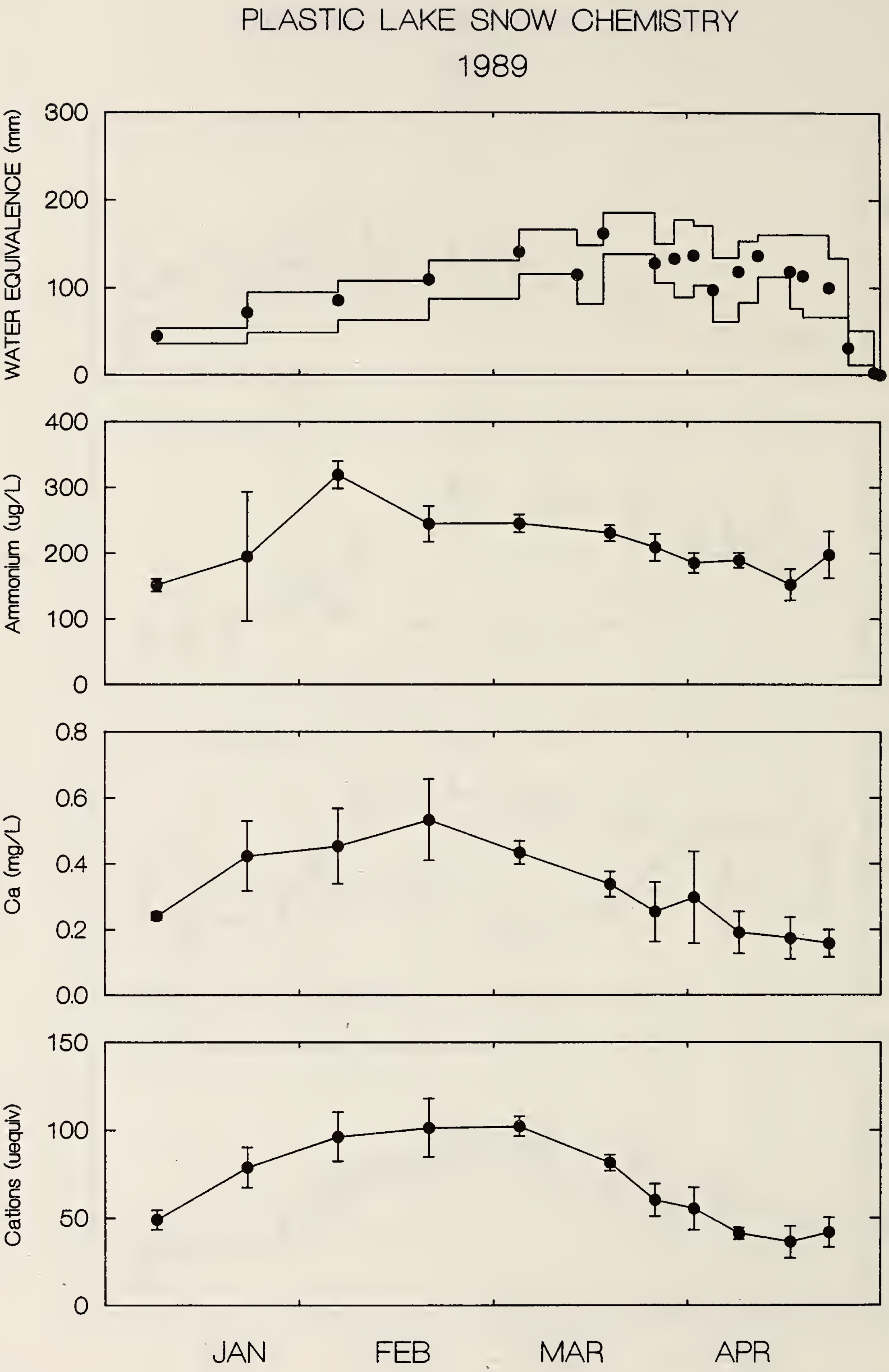


Figure 5 (cont'd)

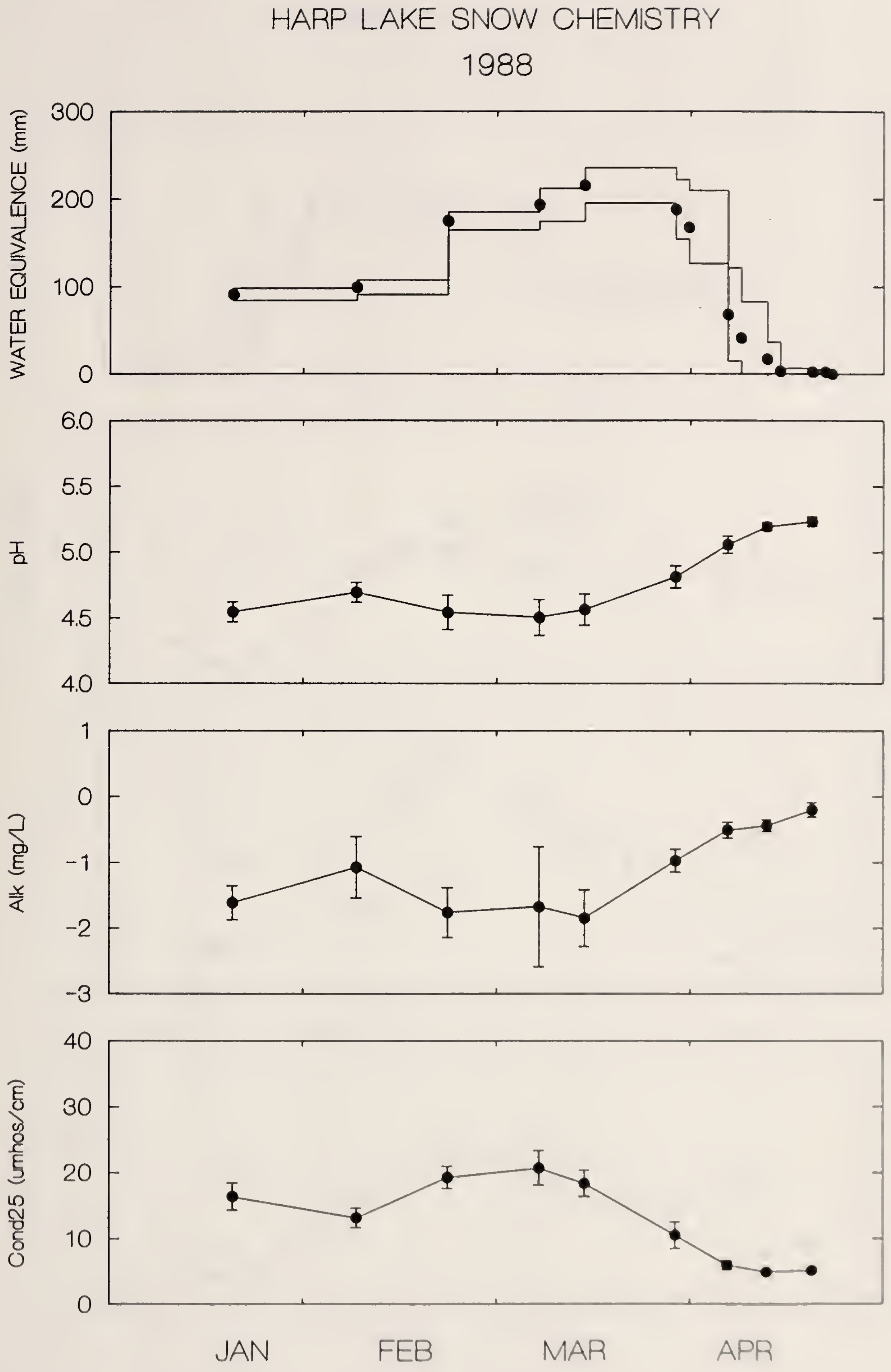

HARP LAKE SNOW CHEMISTRY
1988
WATER EQUIVALENCE (mm)
300
200
100
0
pH
6.0
5.5
5.0
4.5
4.0
Alk (mg/L)
1
0
-1
-2
-3
Cond25 (umhos/cm)
40
30
20
10
0
JAN
FEB
MAR
APR

Figure 6

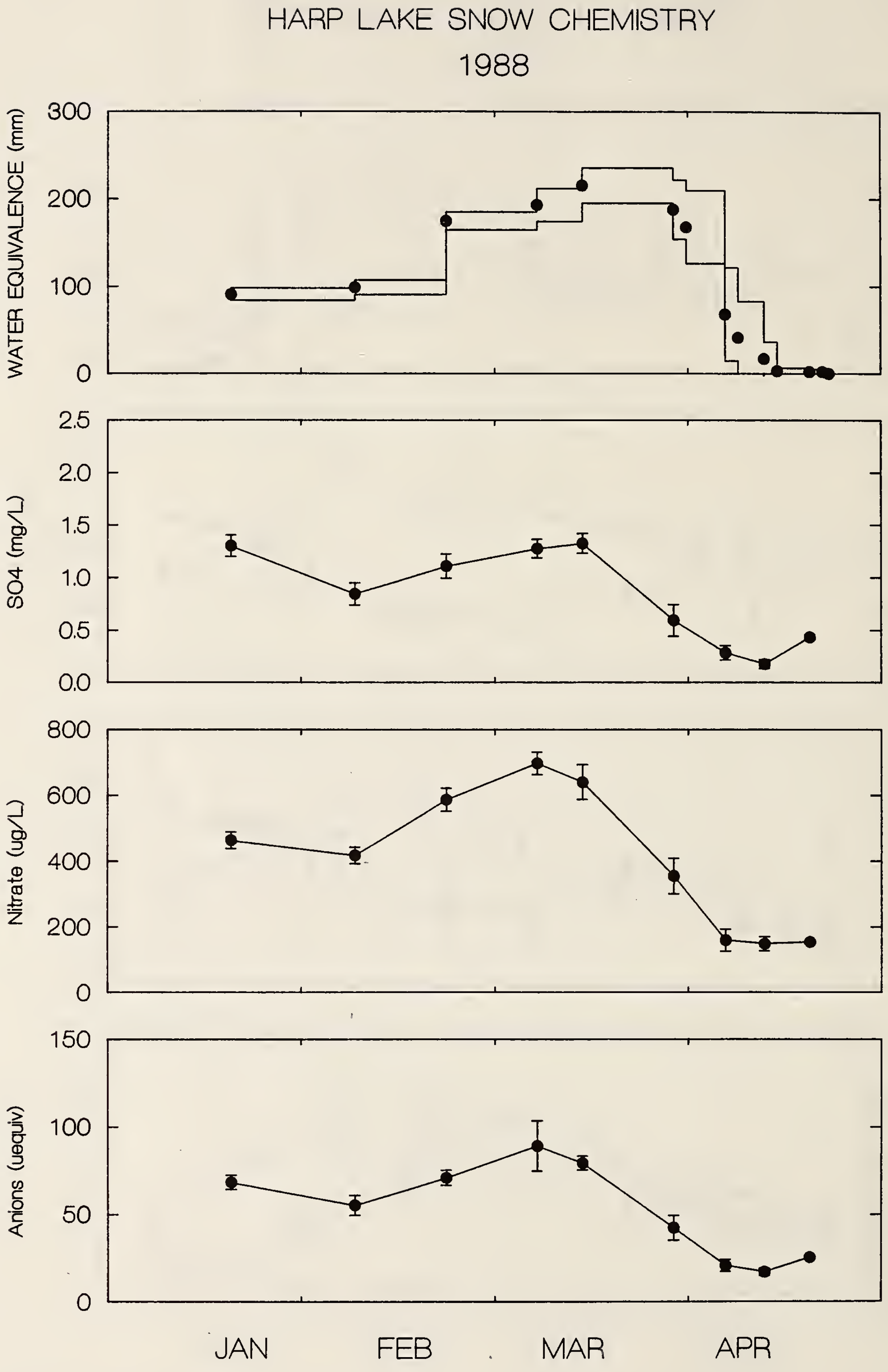


Figure 6 (cont'd)

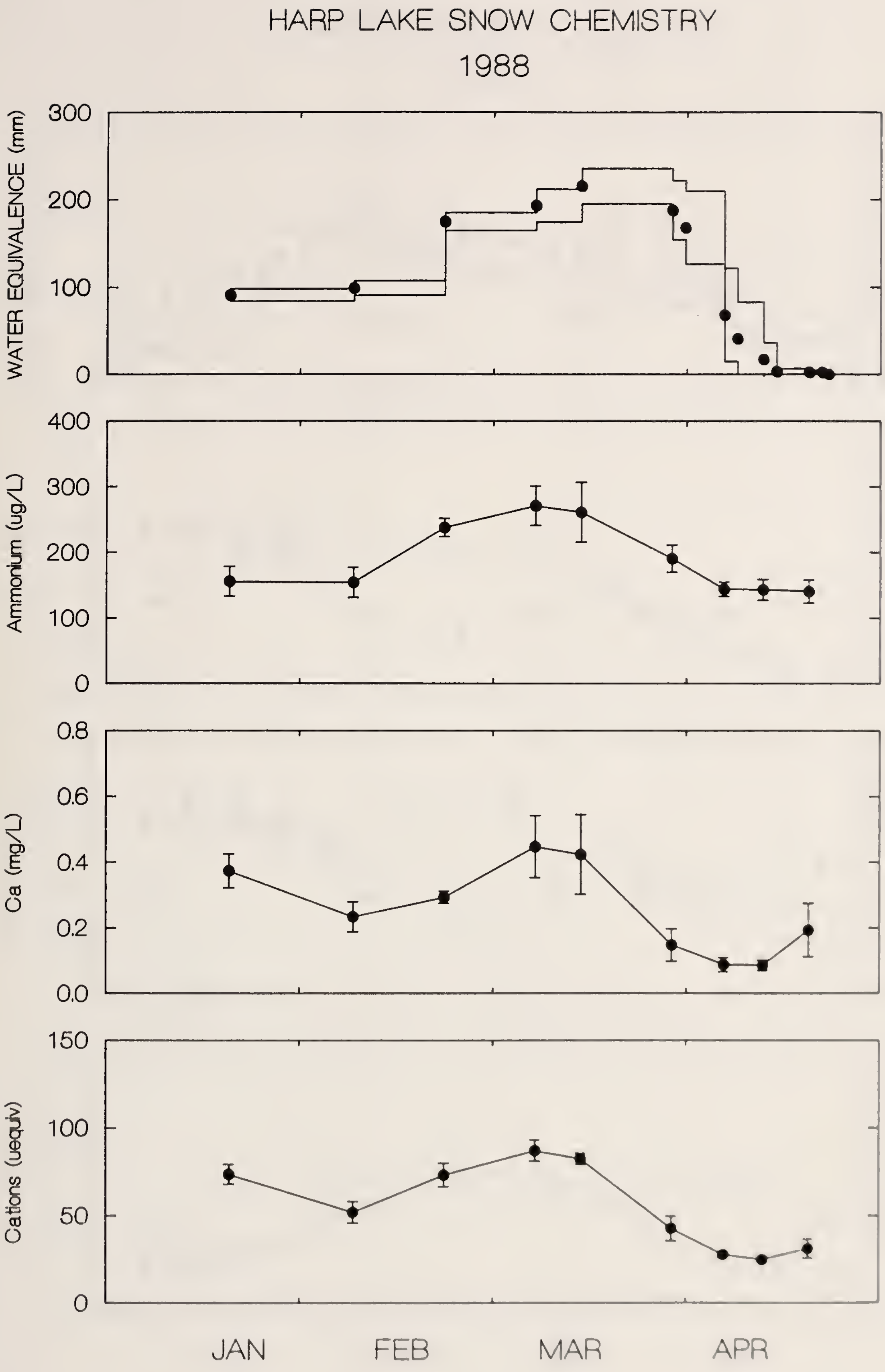


Figure 6 (cont'd)

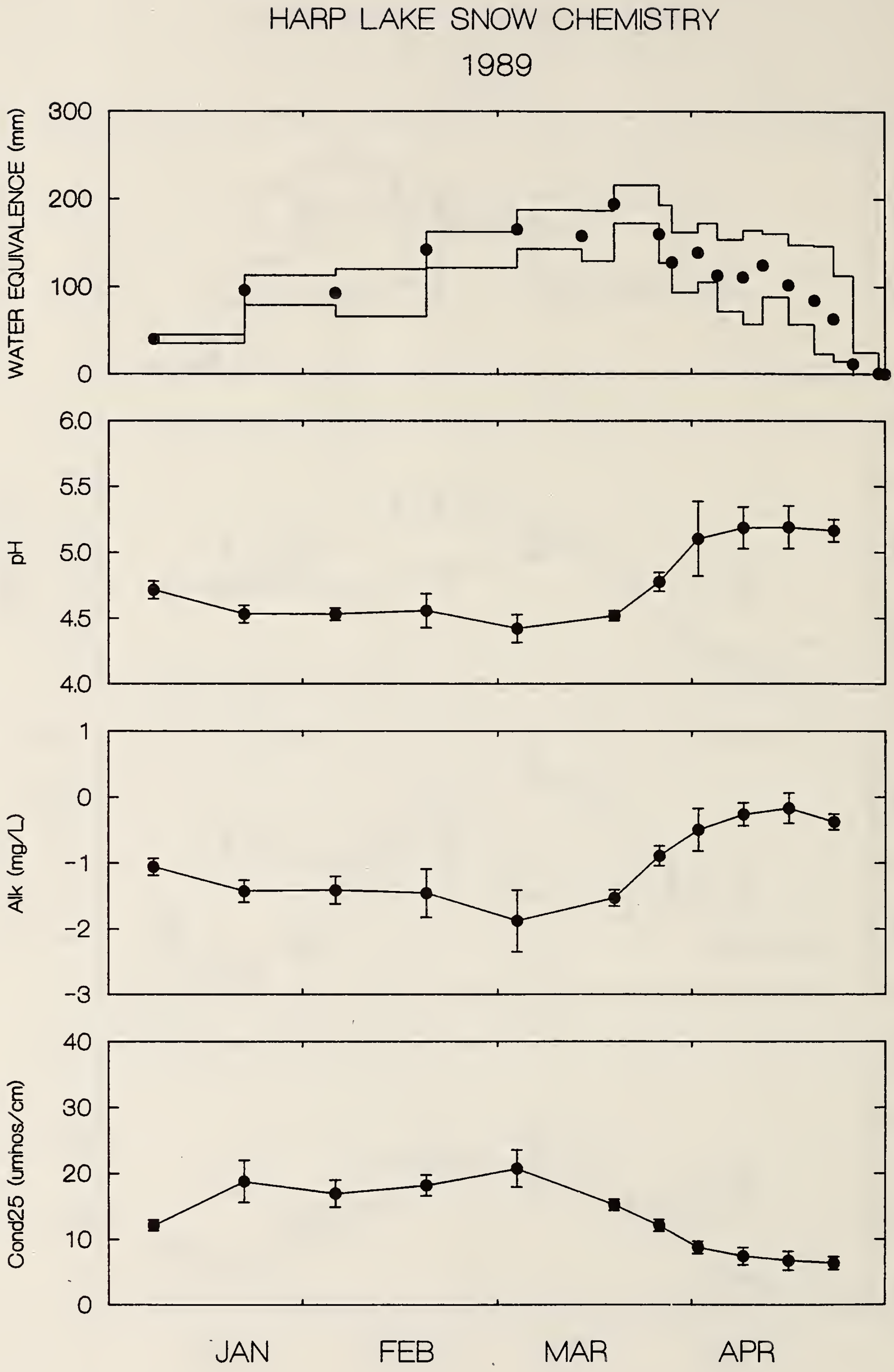


Figure 6 (cont'd)

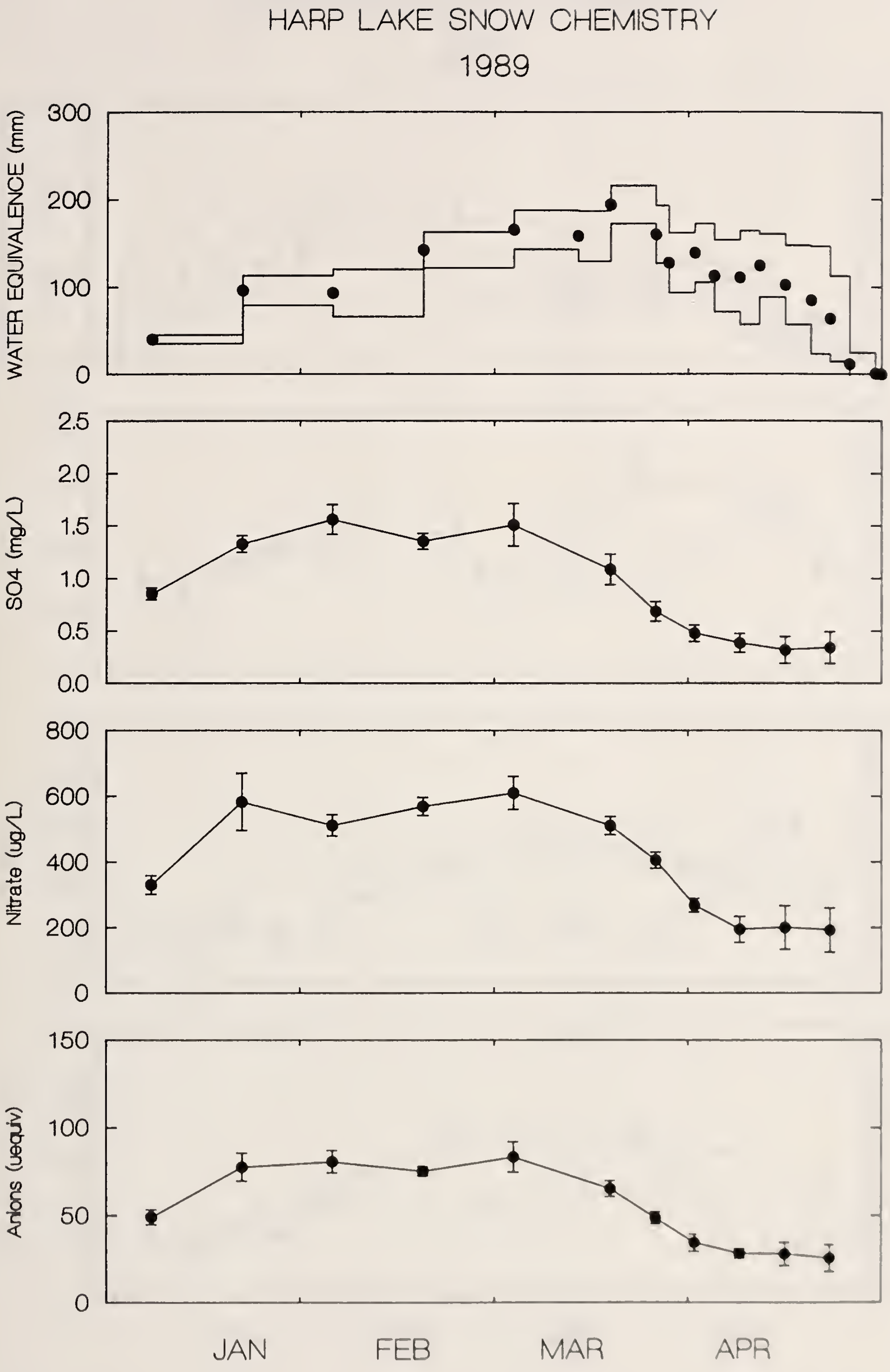


Figure 6 (cont'd)

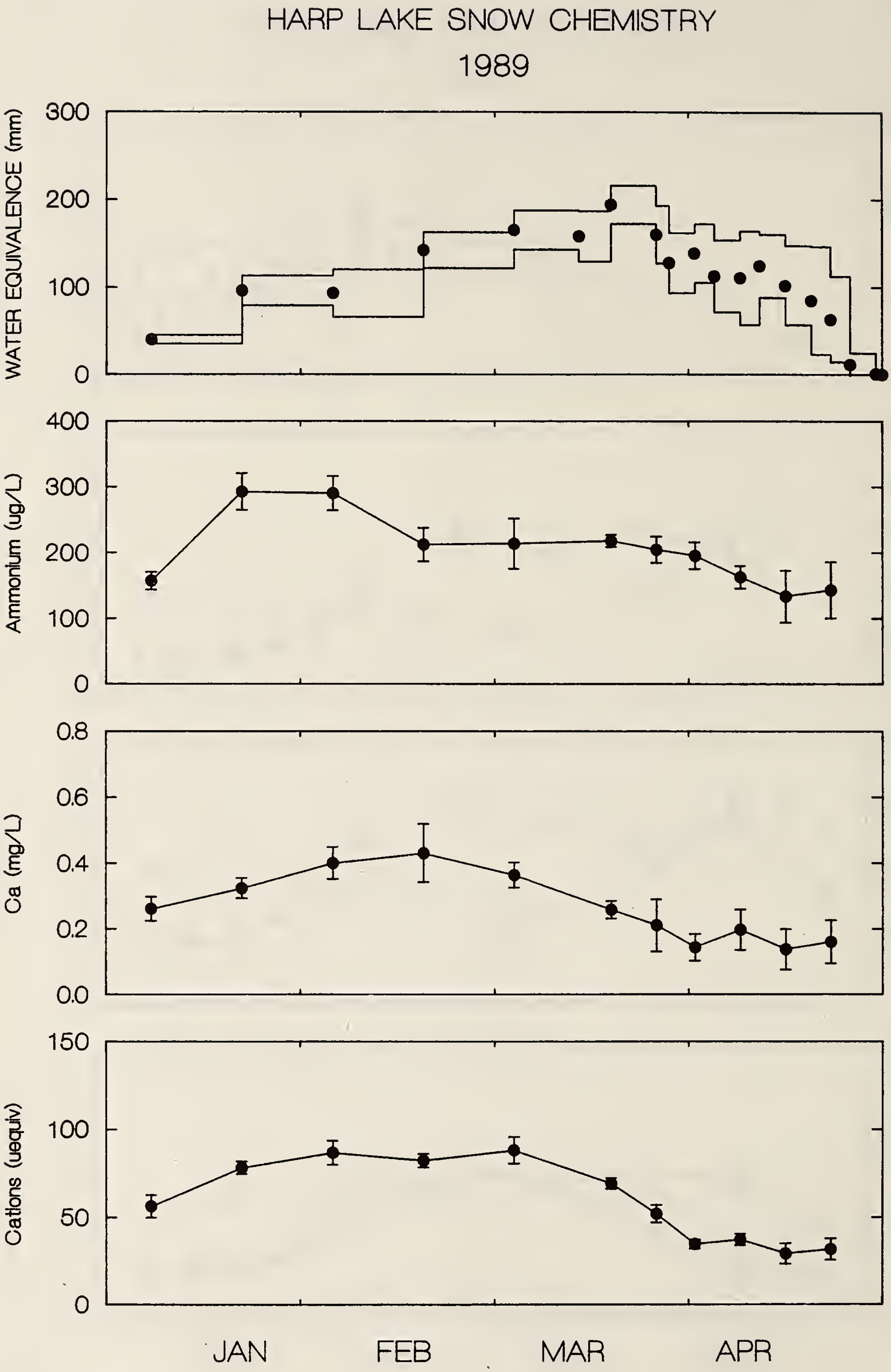


Figure 6 (cont'd)

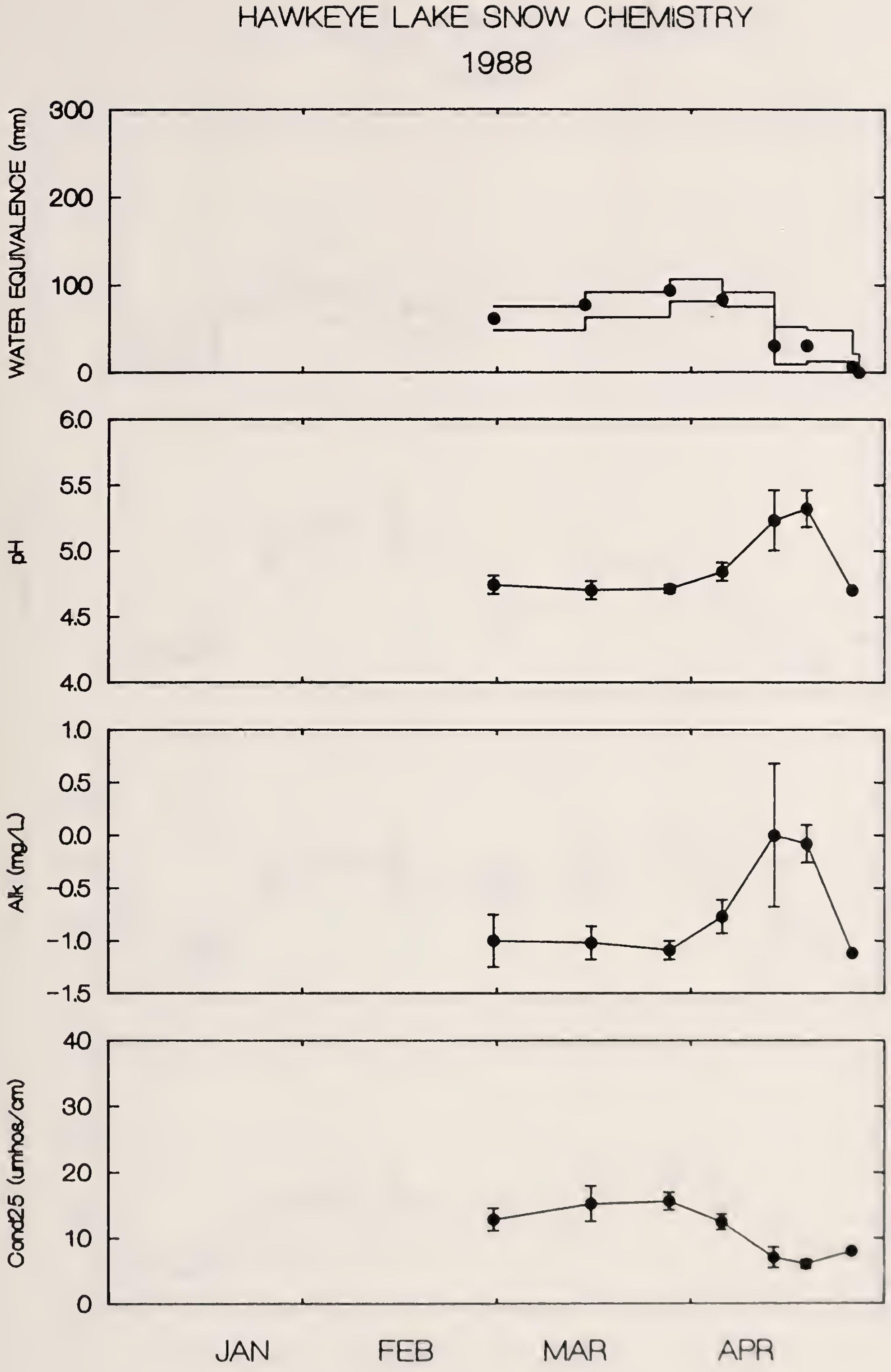

HAWKEYE LAKE SNOW CHEMISTRY
1988
WATER EQUIVALENCE (mm)
300
200
100
0
pH
6.0
5.5
5.0
4.5
4.0
Alk (mg/L)
1.0
0.5
0.0
-0.5
-1.0
-1.5
Cond25 (umhos/cm)
40
30
20
10
0
JAN
FEB
MAR
APR

Figure 7

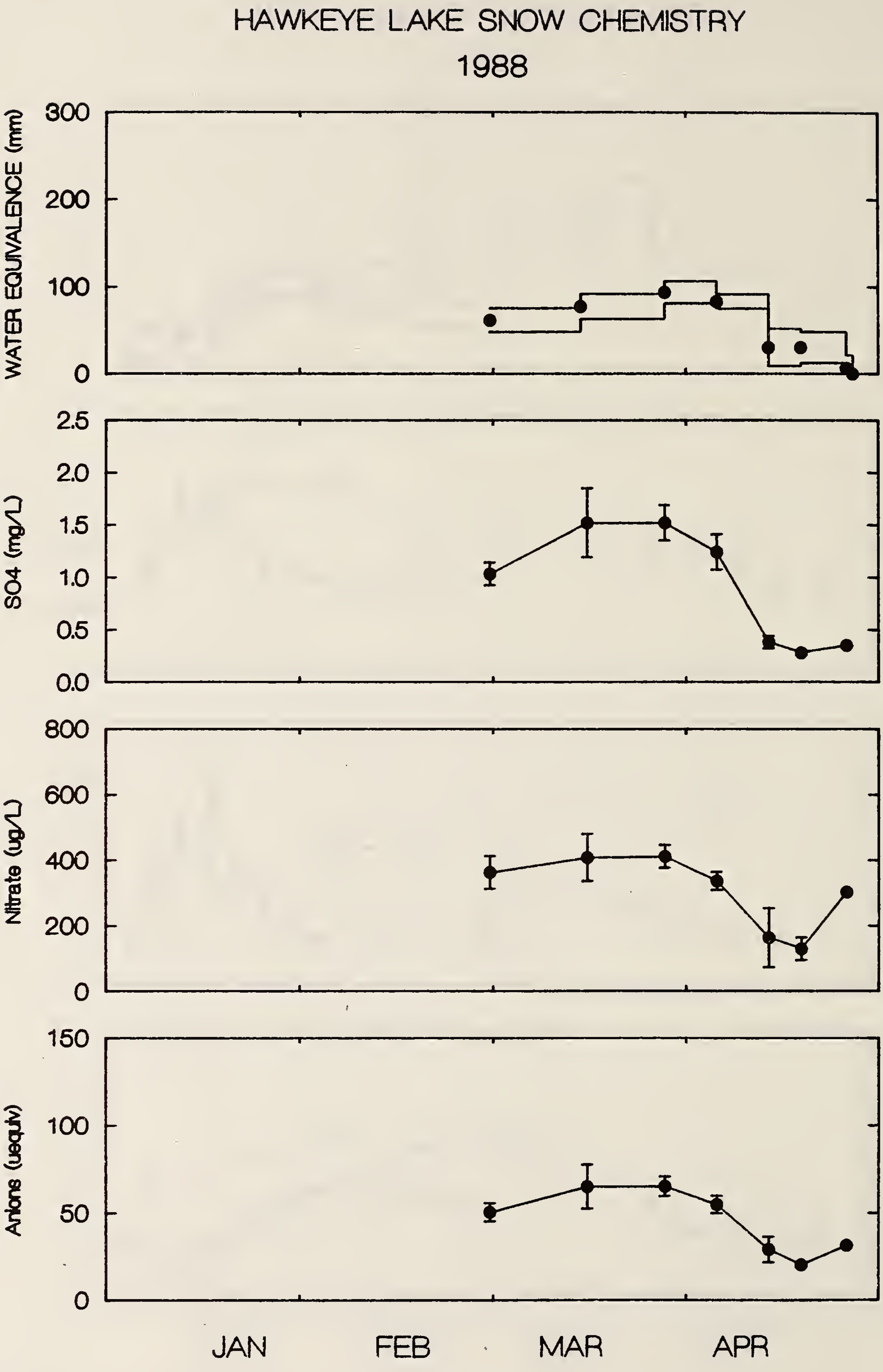


Figure 7 (cont'd)

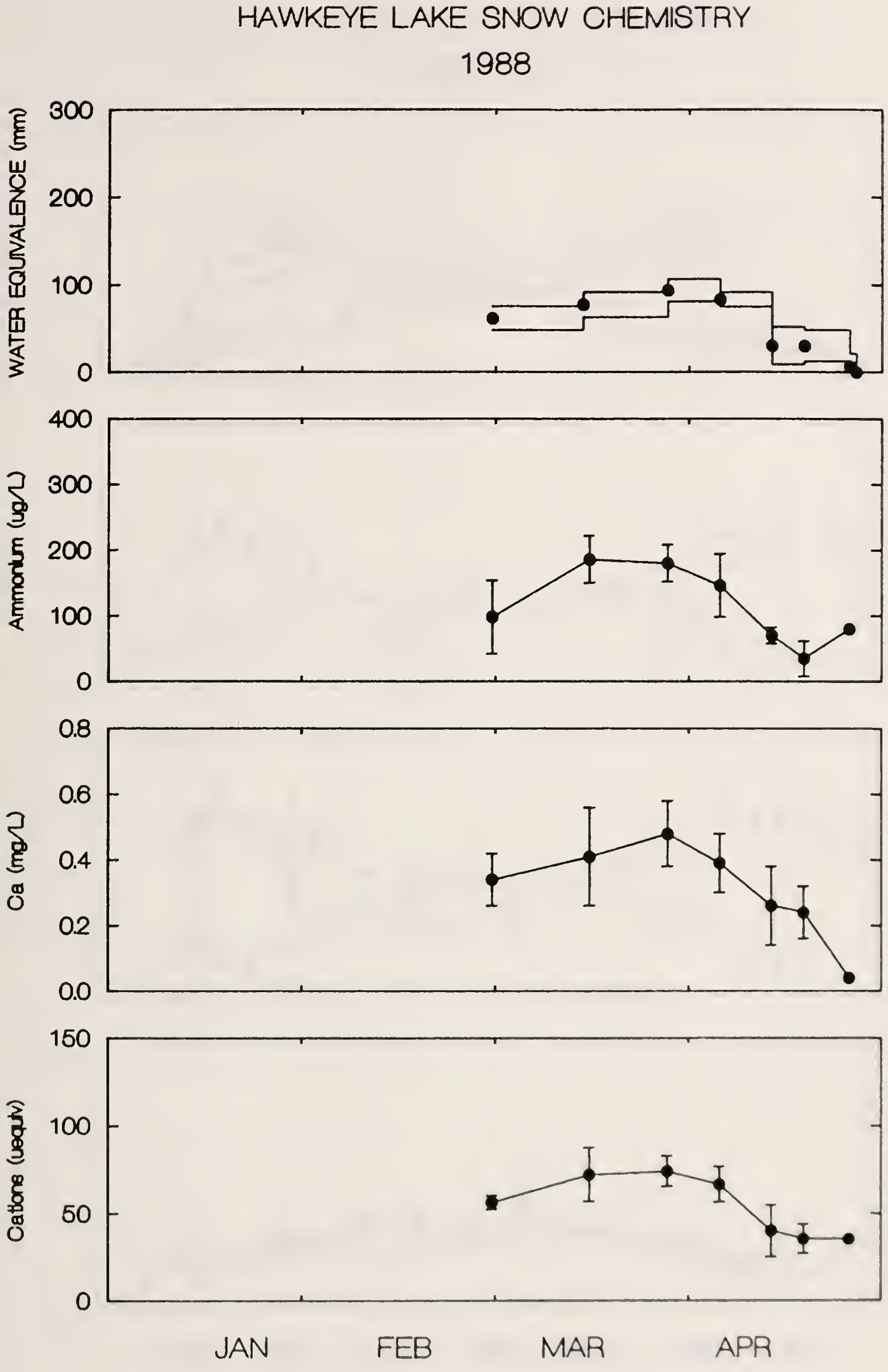


Figure 7 (cont'd)

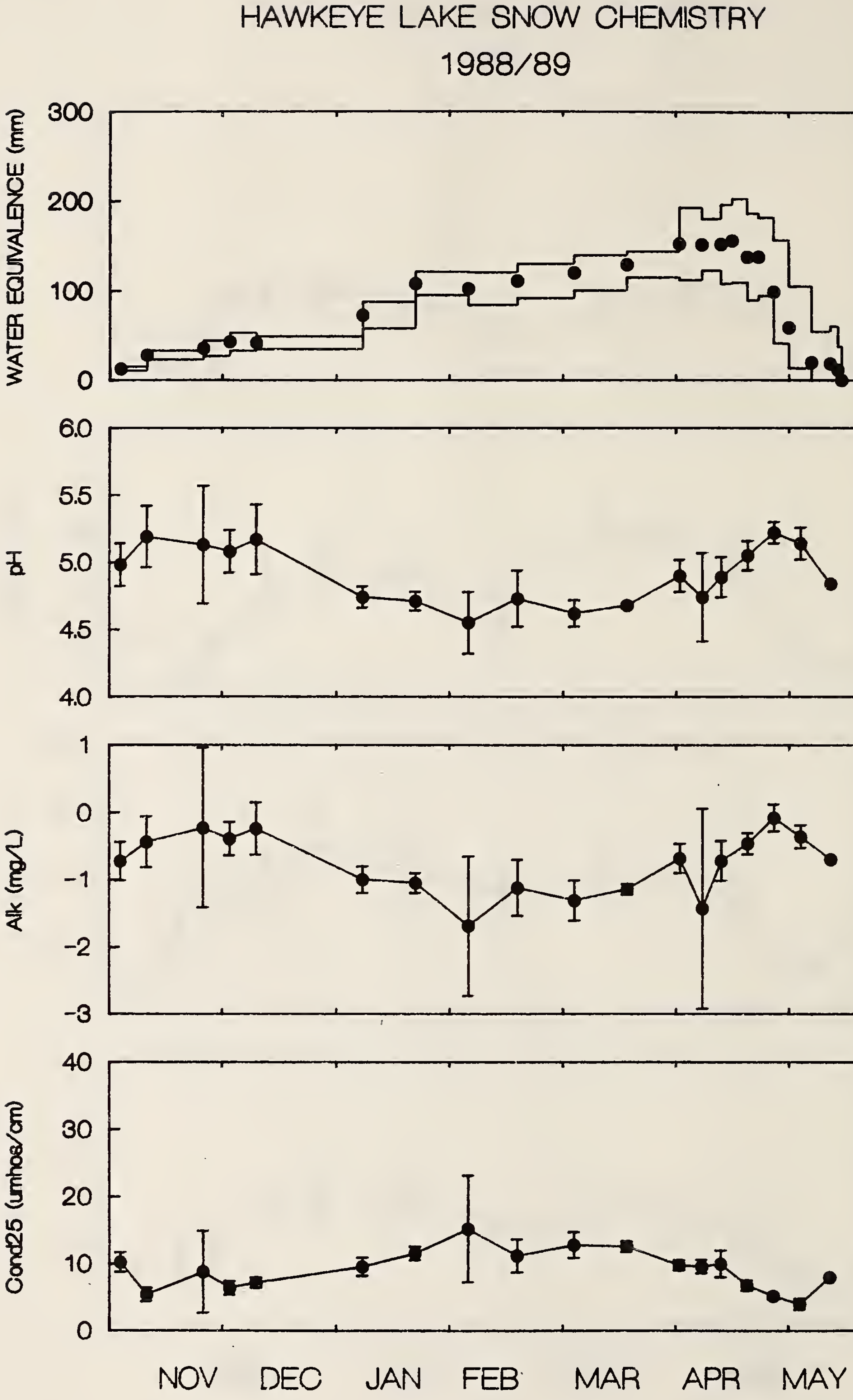


Figure 7 (cont'd)

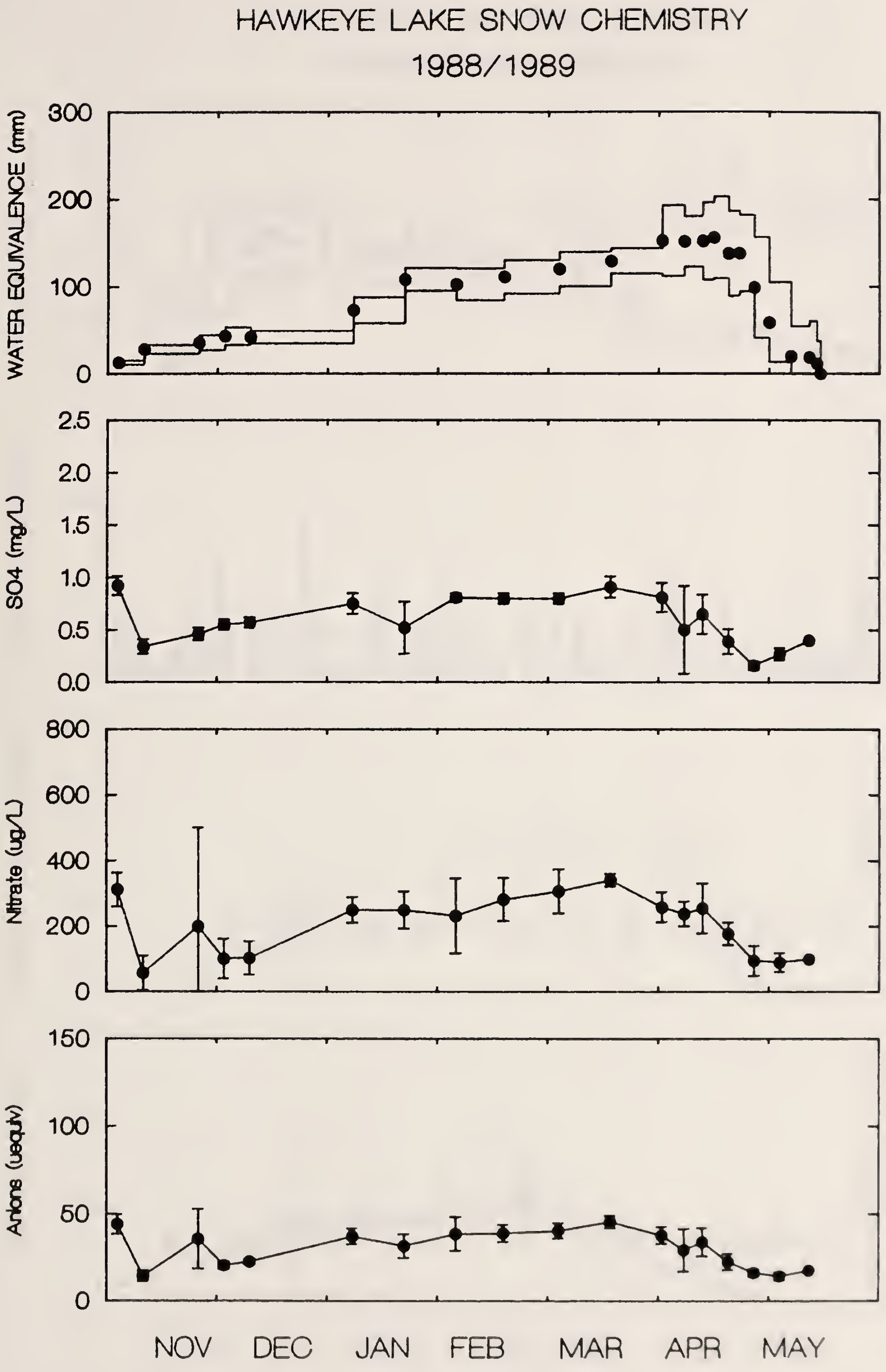


Figure 7 (cont'd)

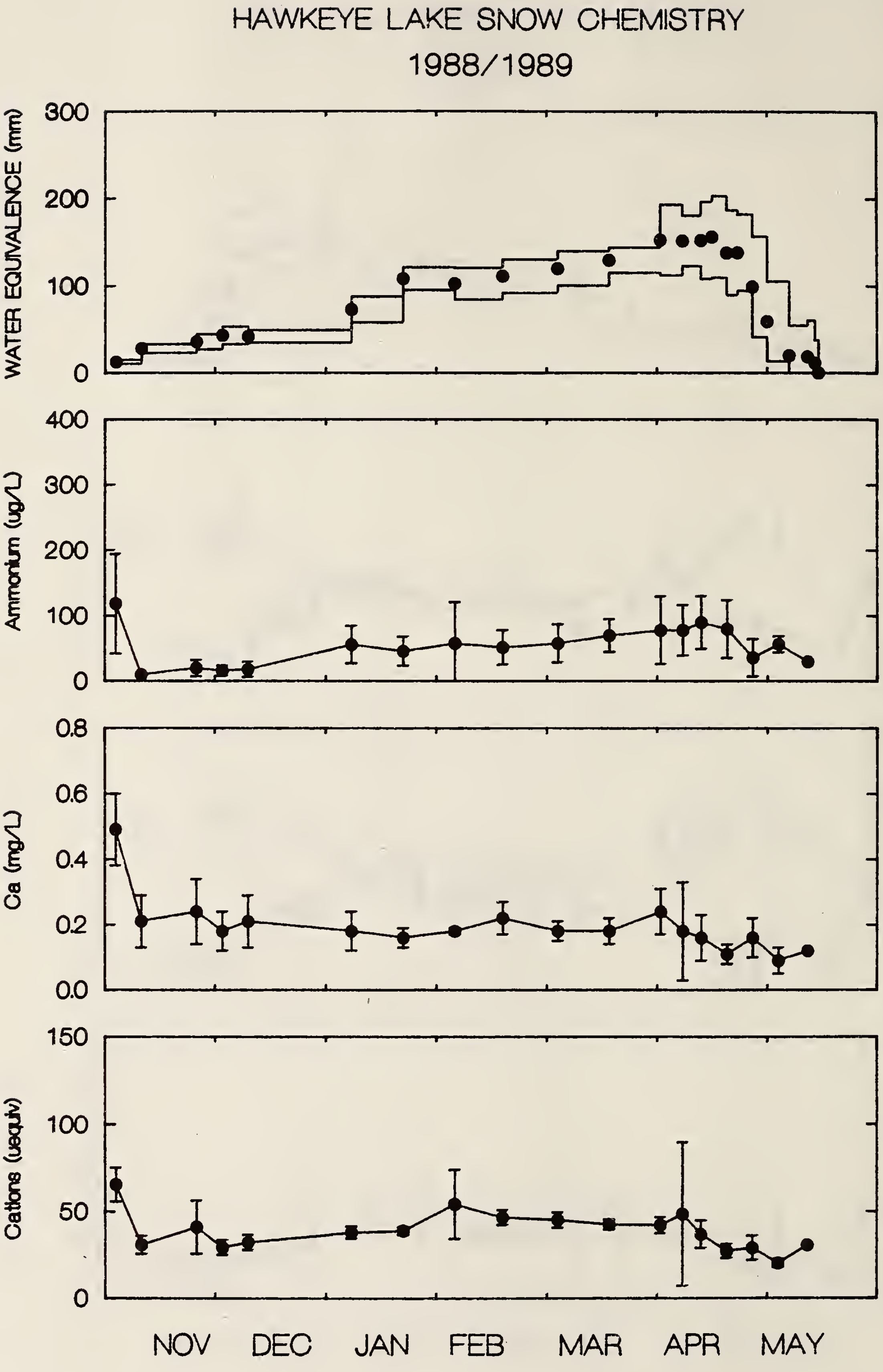


Figure 7 (cont'd)

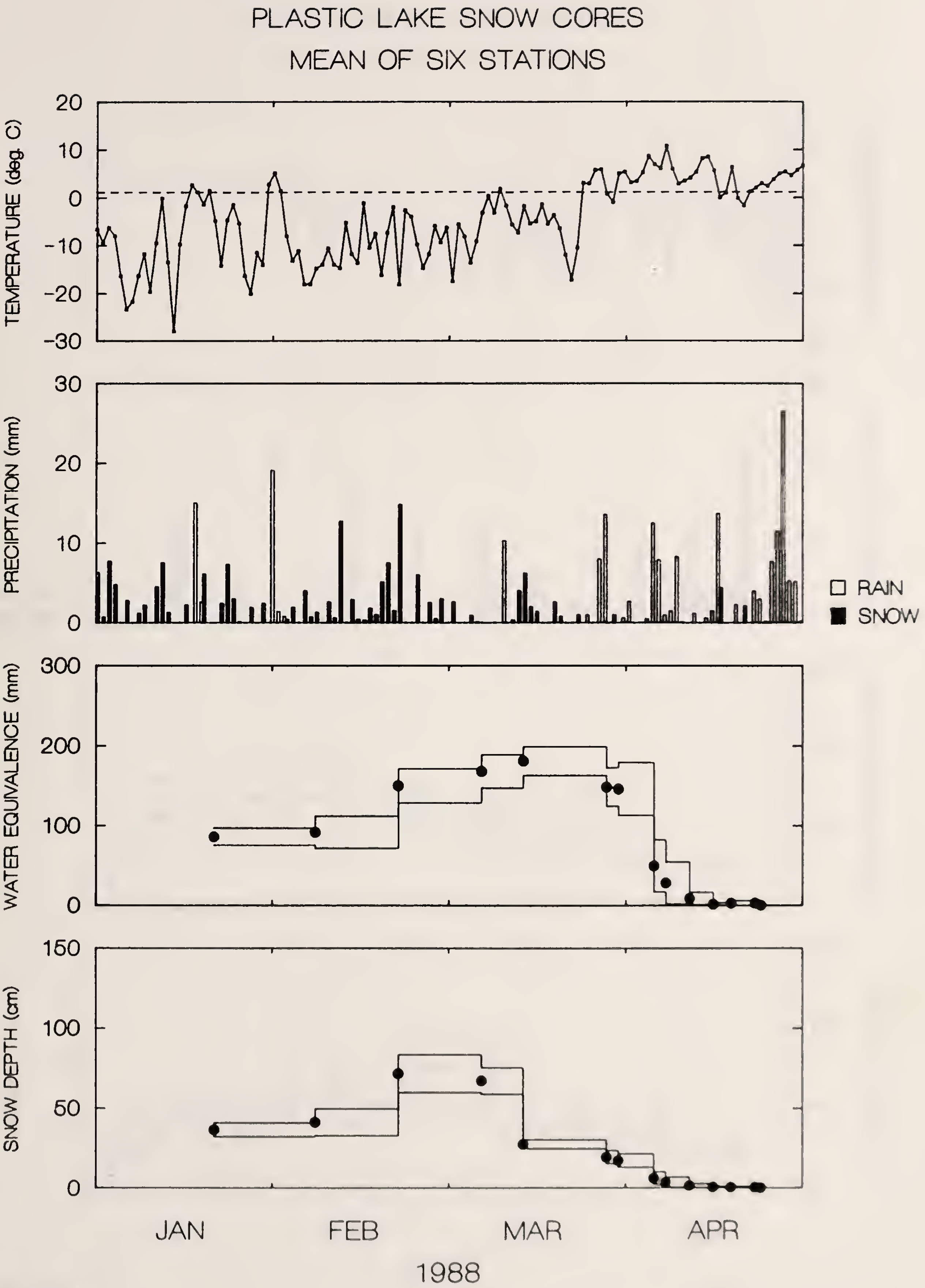

PLASTIC LAKE SNOW CORES
MEAN OF SIX STATIONS
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
□ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
150
100
50
0
JAN
FEB
MAR
APR
1988

Figure 8

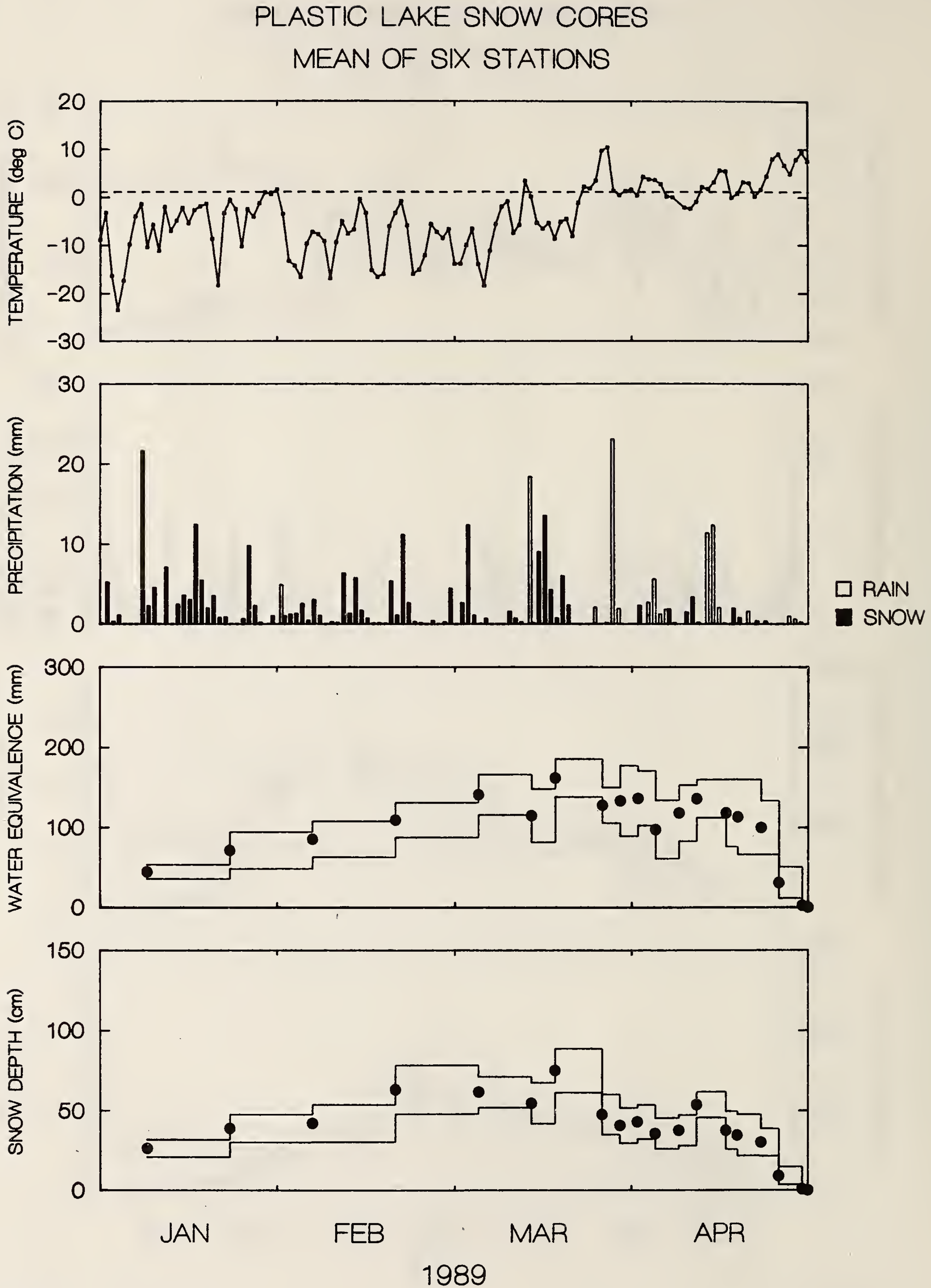


Figure 8 (cont'd)

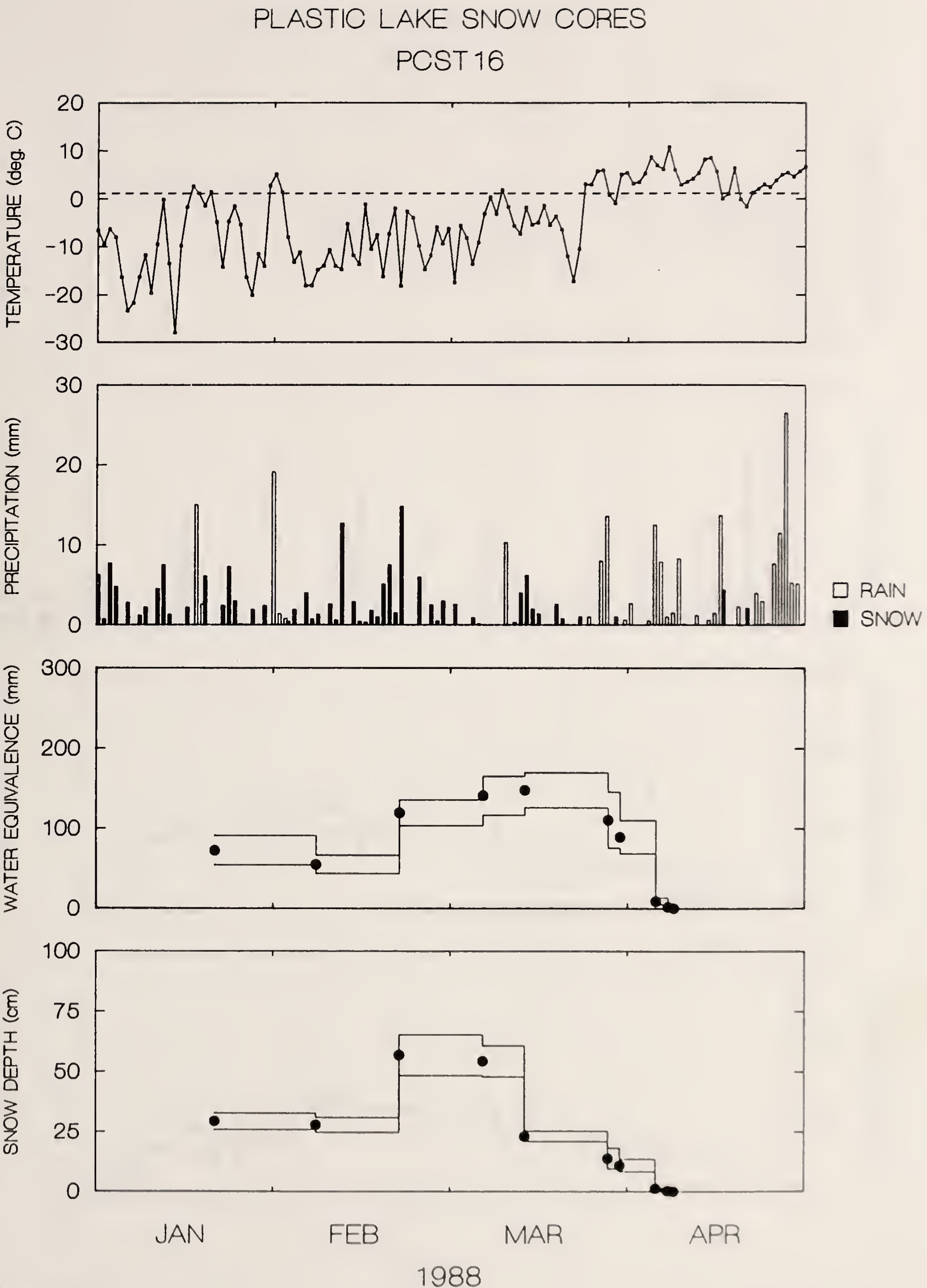

PLASTIC LAKE SNOW CORES
PCST16
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
RAIN
SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 9

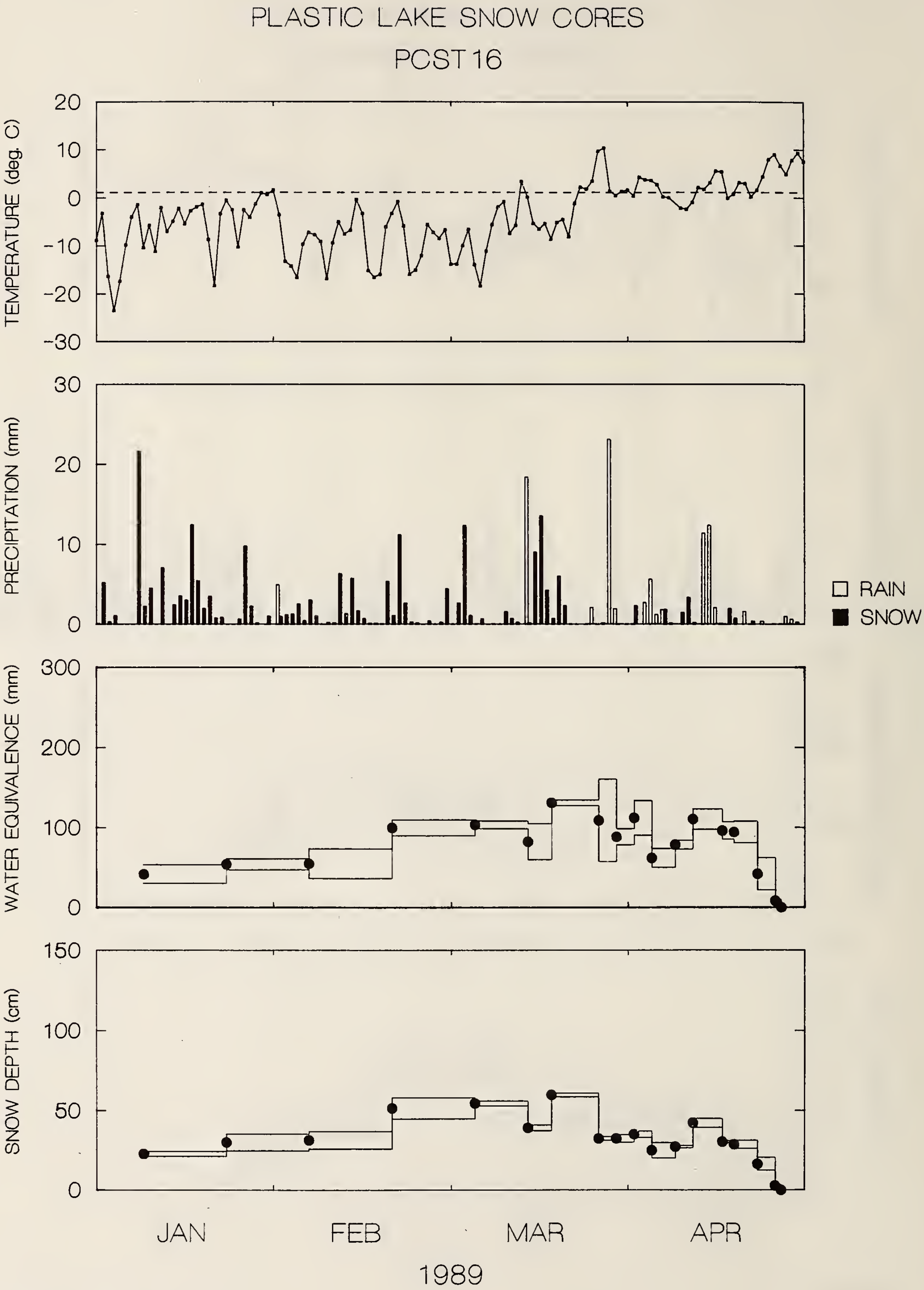


Figure 9 (cont'd)

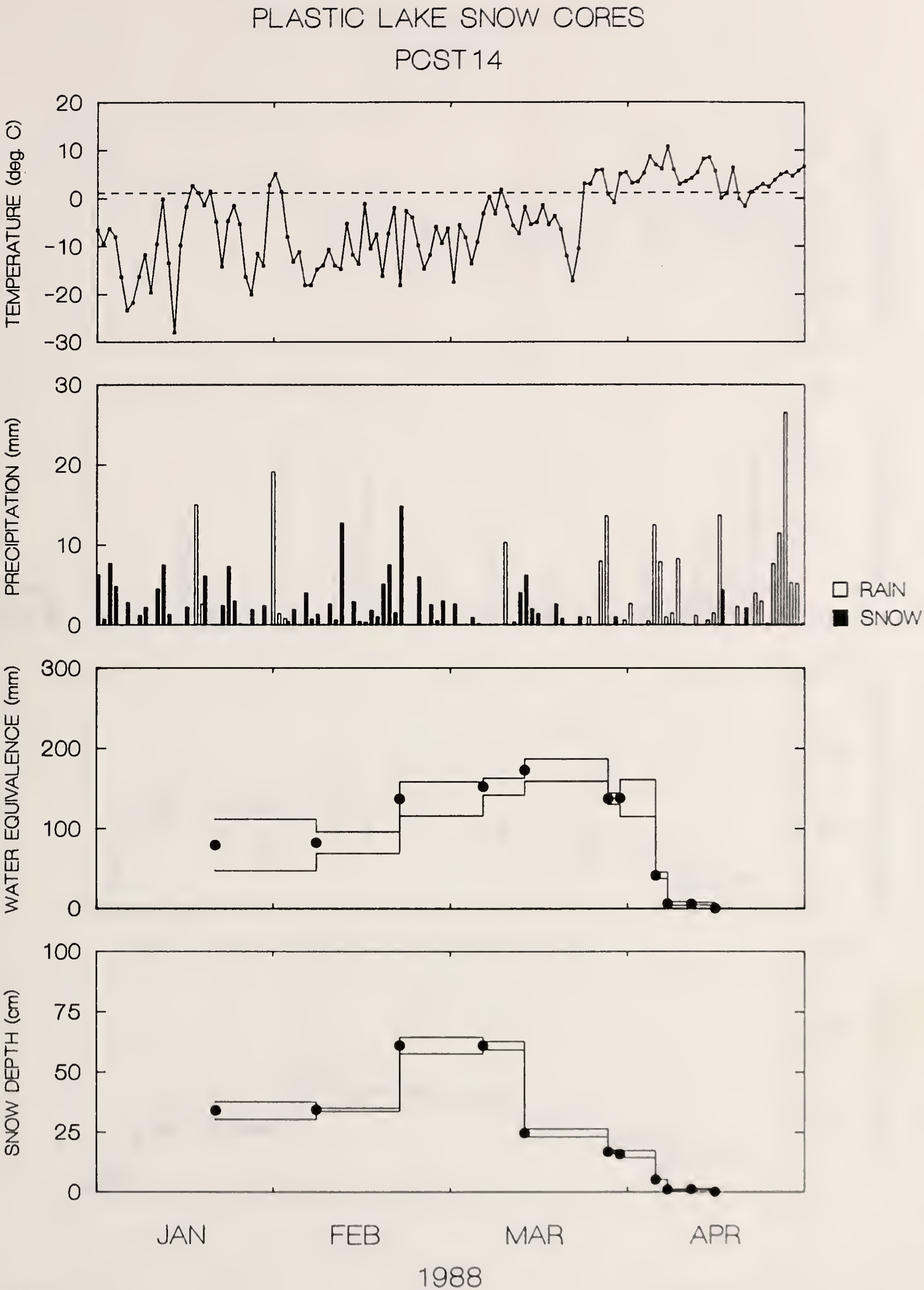

PLASTIC LAKE SNOW CORES
PCST14
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
☐ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 10

PLASTIC LAKE SNOW CORES

PCST14

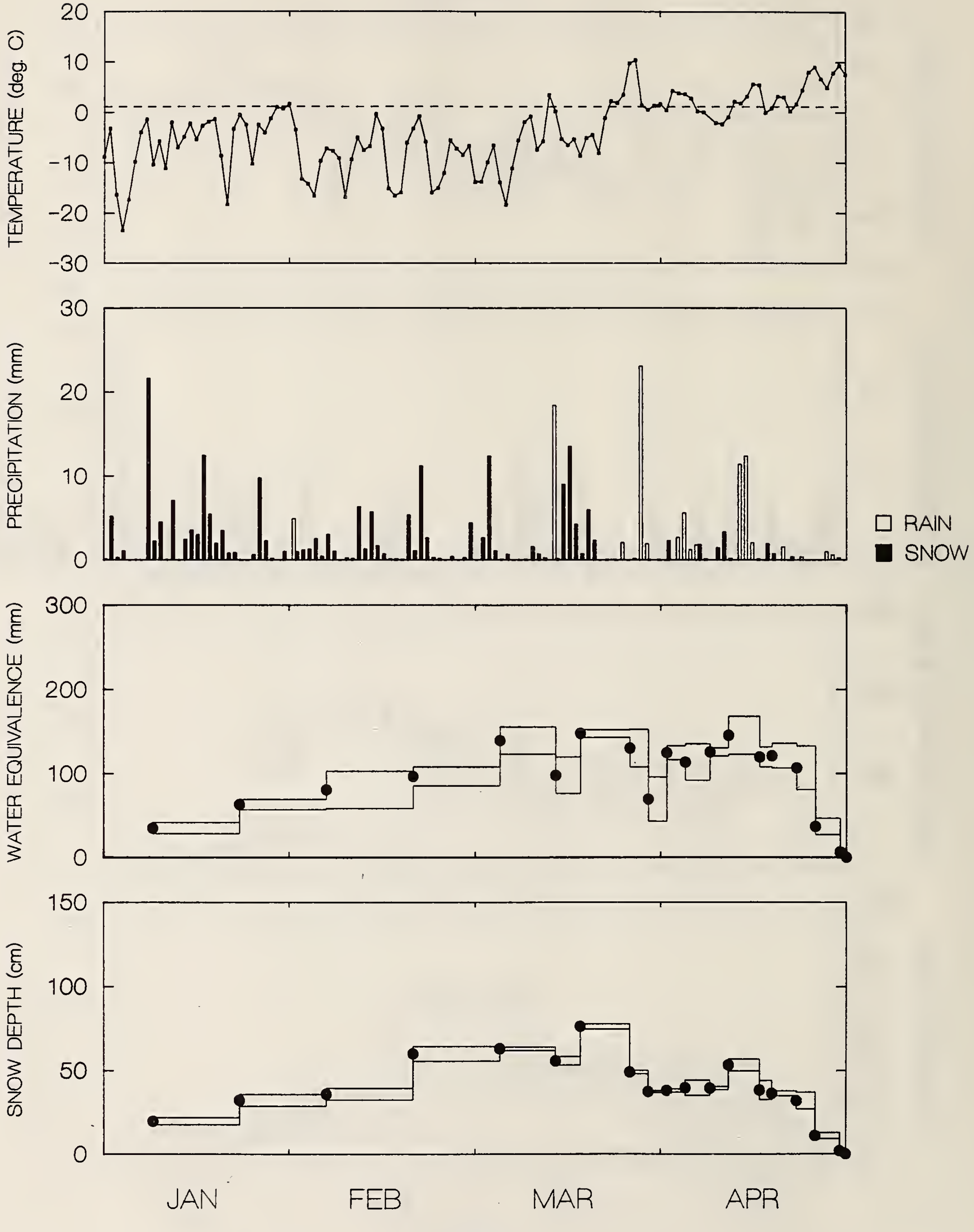


Figure 10 (cont'd)

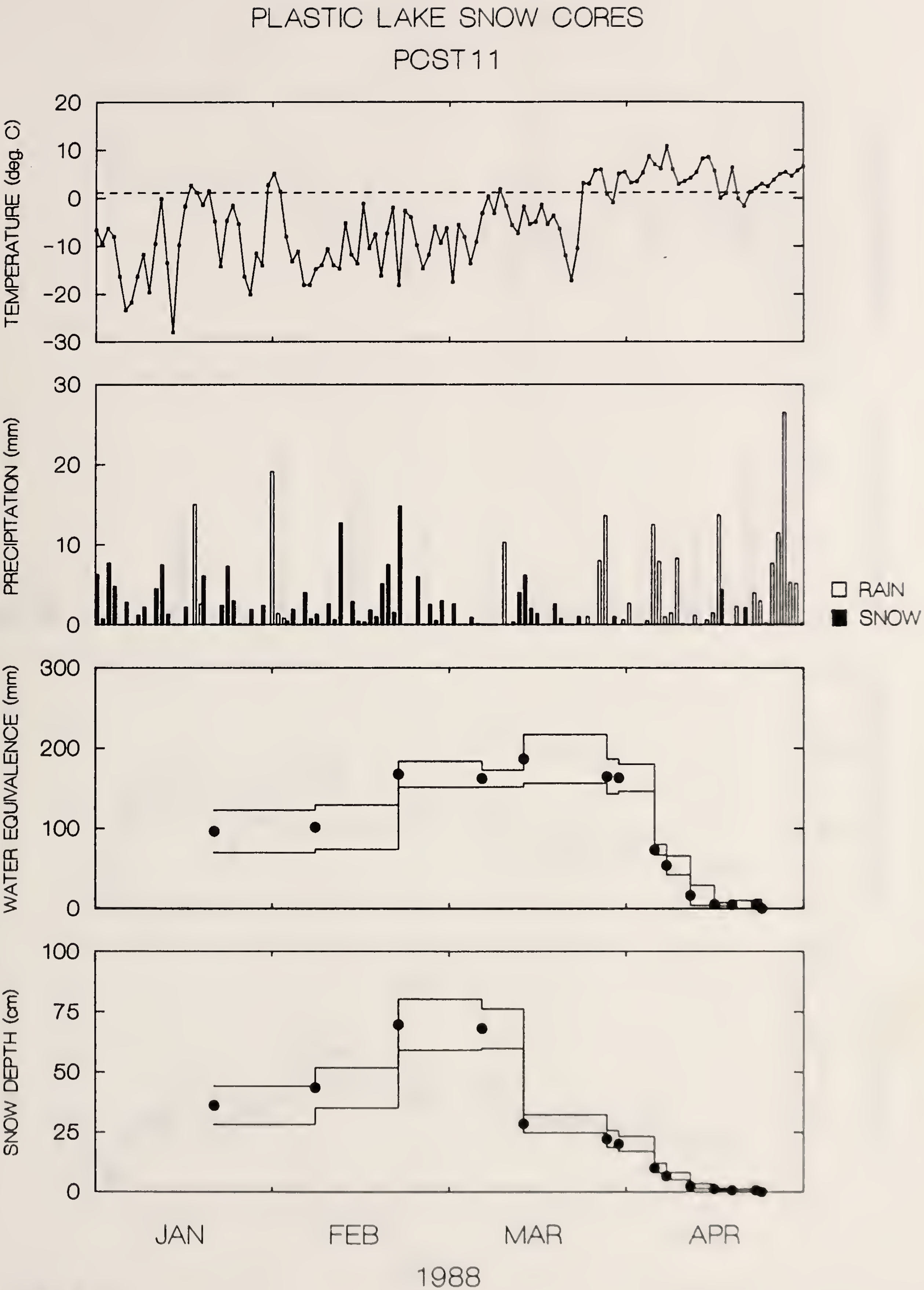

PLASTIC LAKE SNOW CORES
PCST11
TEMPERATURE (deg. C)
20
10
0
−10
−20
−30
PRECIPITATION (mm)
30
20
10
0
☐ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 11

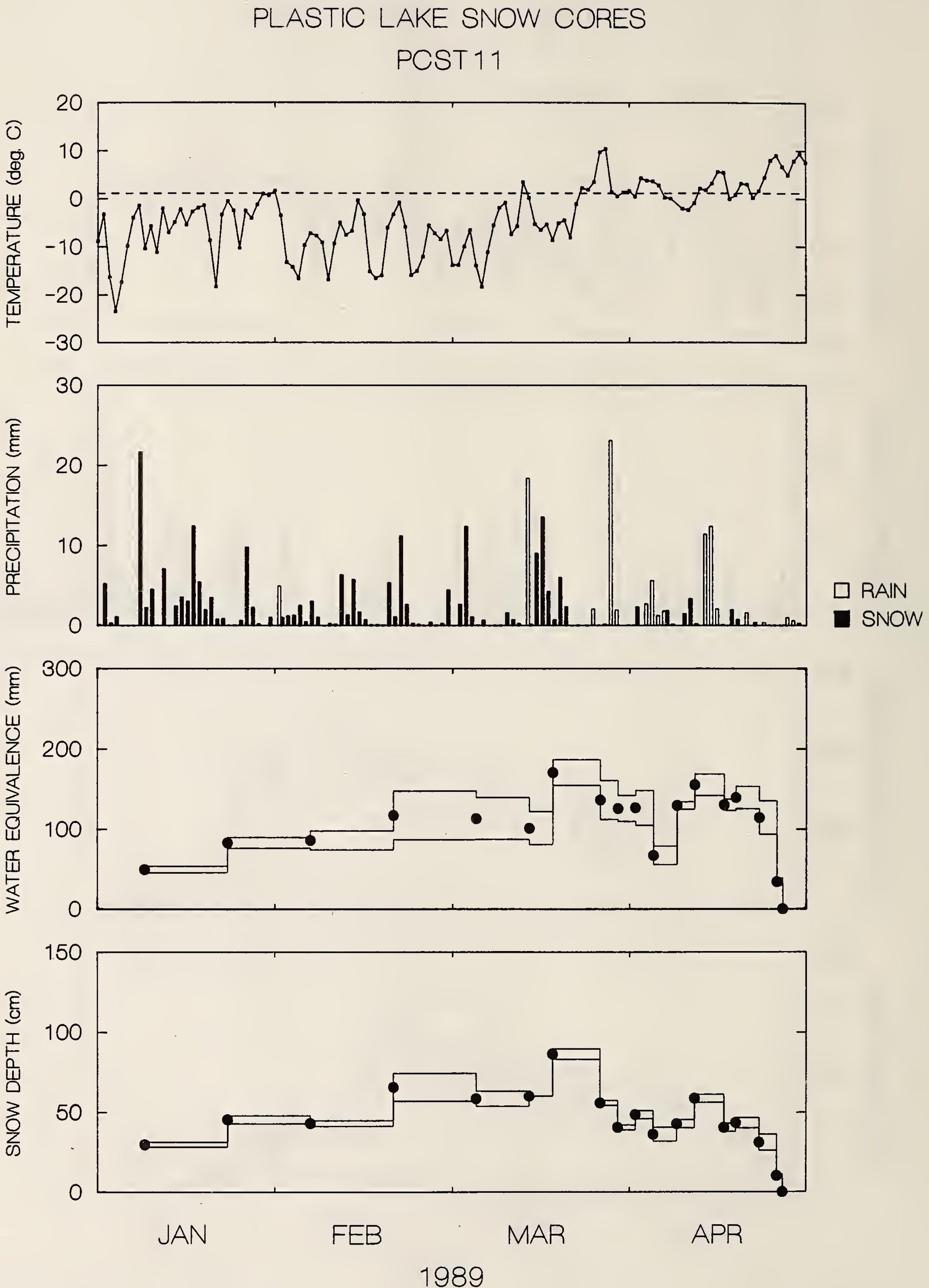


Figure 11 (cont'd)

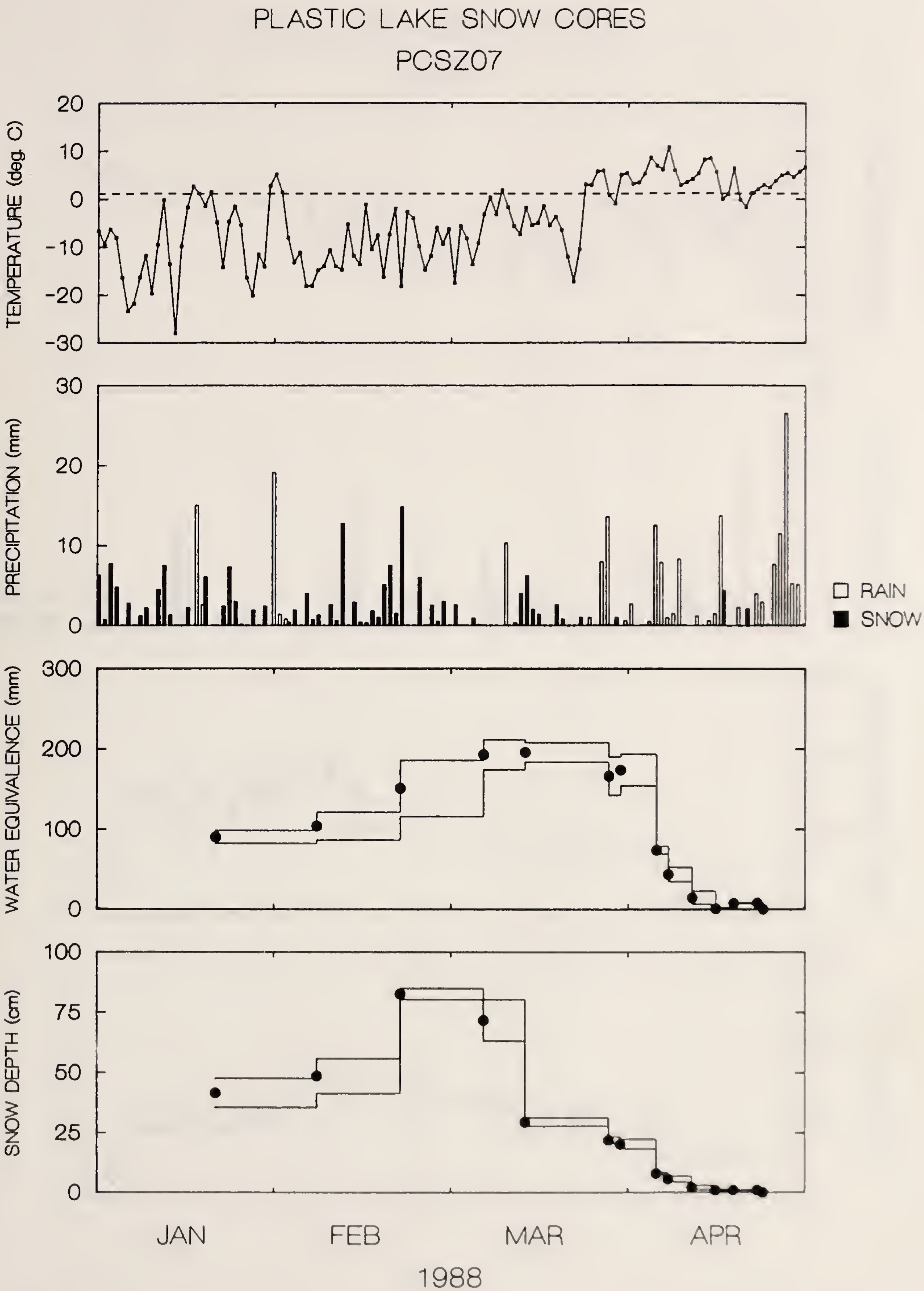

PLASTIC LAKE SNOW CORES
PCSZ07
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
☐ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 12

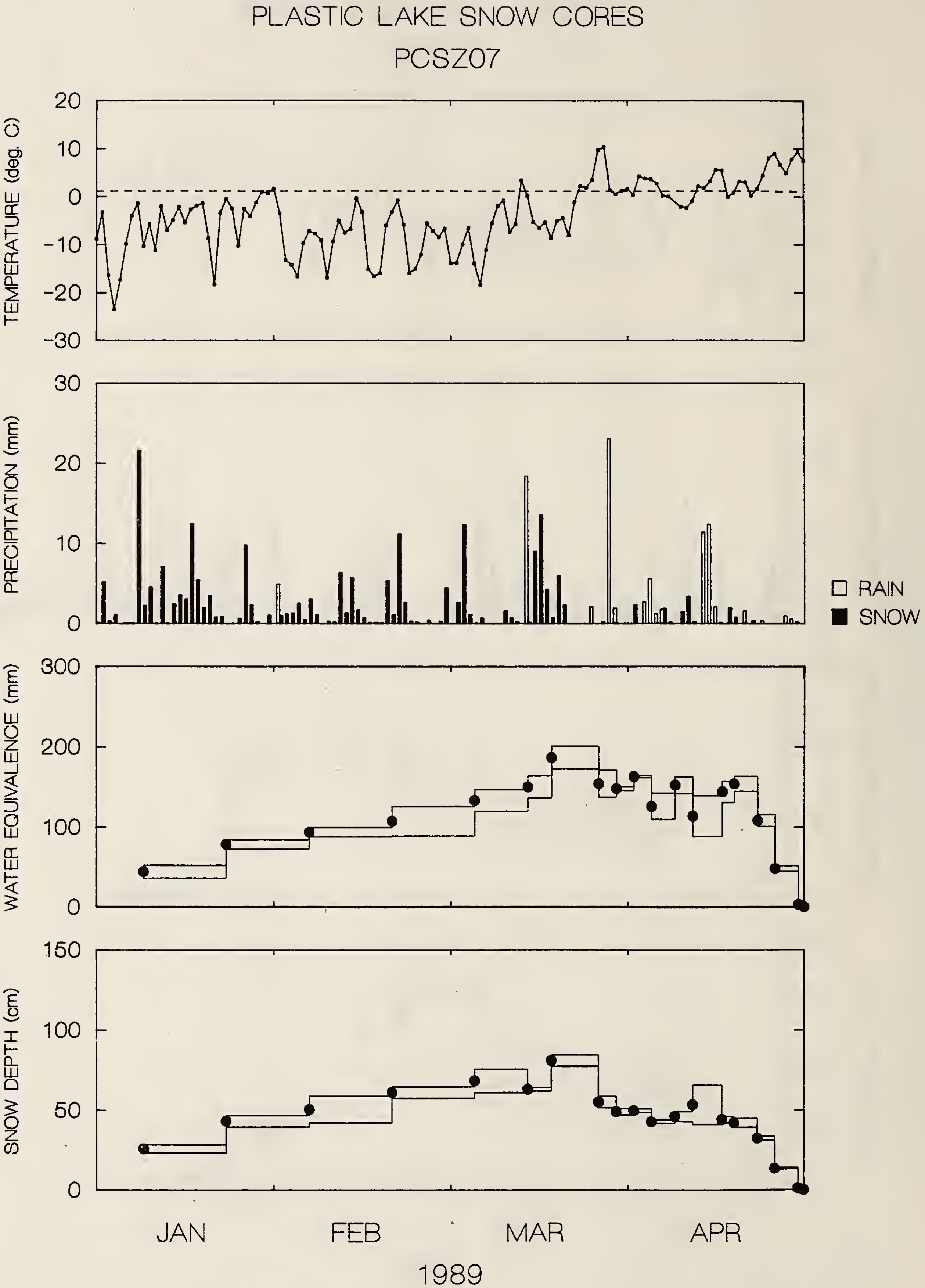


Figure 12 (cont'd)

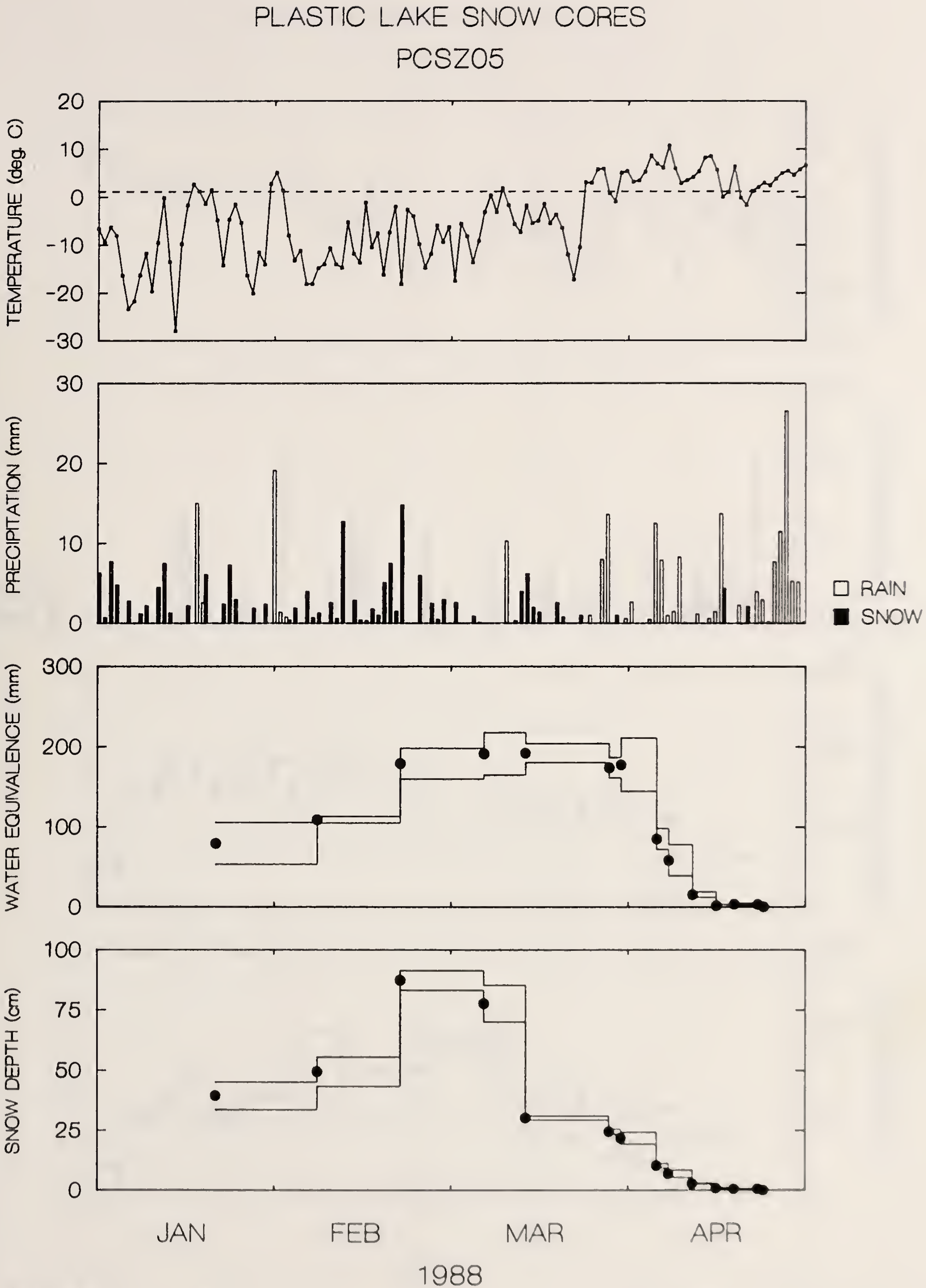


Figure 13 (cont'd)

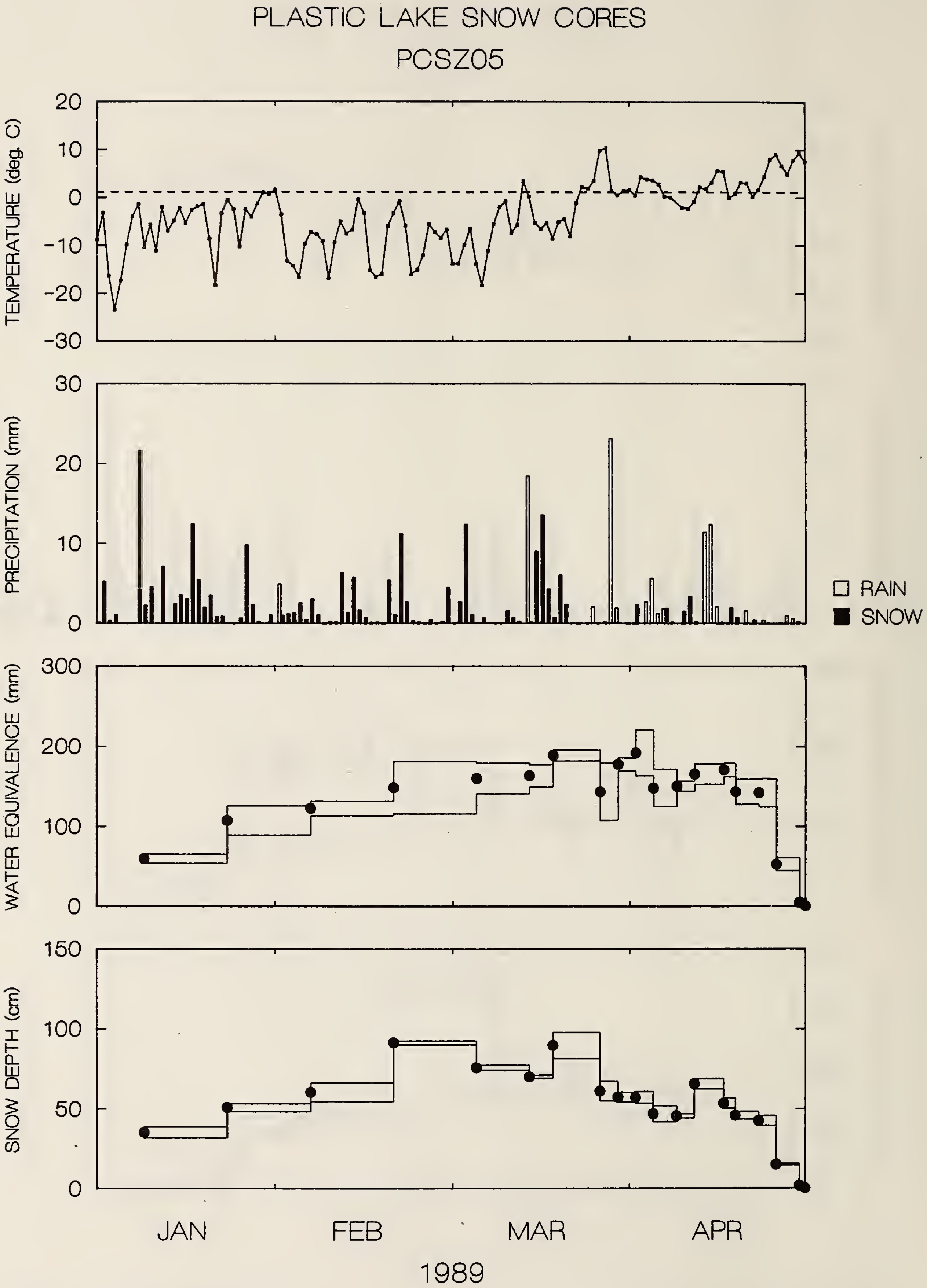


Figure 13 (cont'd)

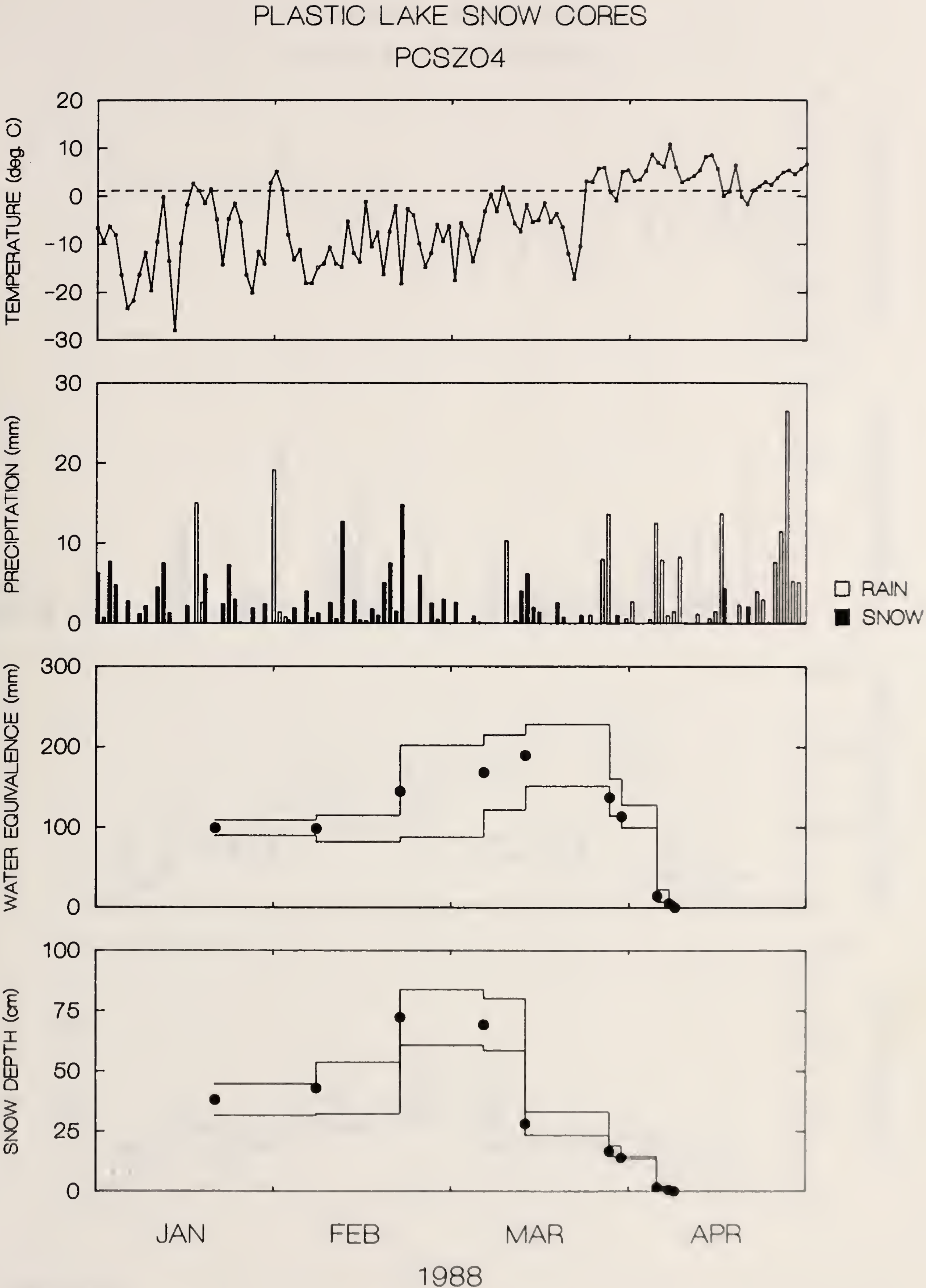

PLASTIC LAKE SNOW CORES
PCSZ04
TEMPERATURE (deg. C)
20
10
0
−10
−20
−30
PRECIPITATION (mm)
30
20
10
0
☐ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 14

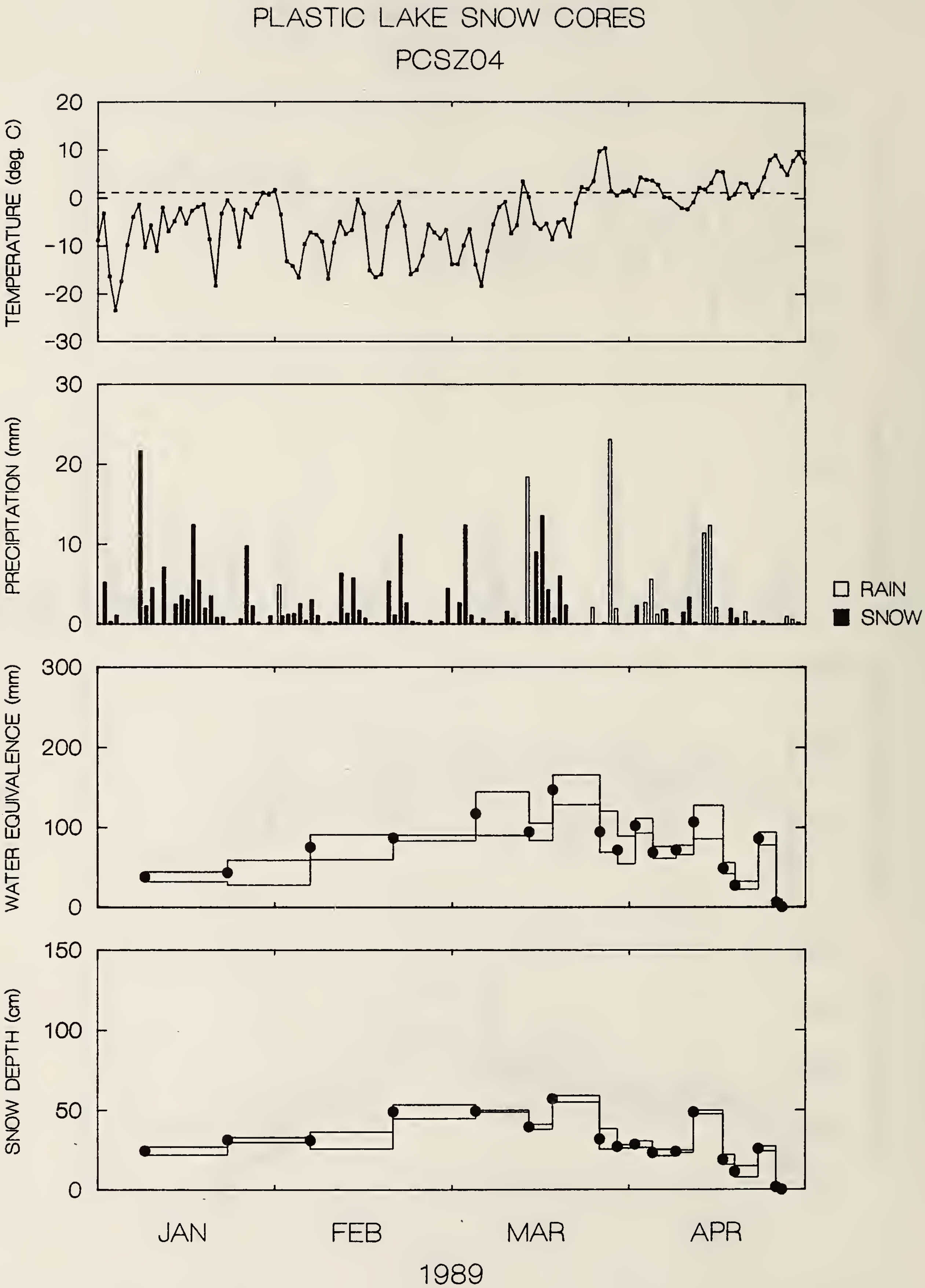


Figure 14 (cont'd)

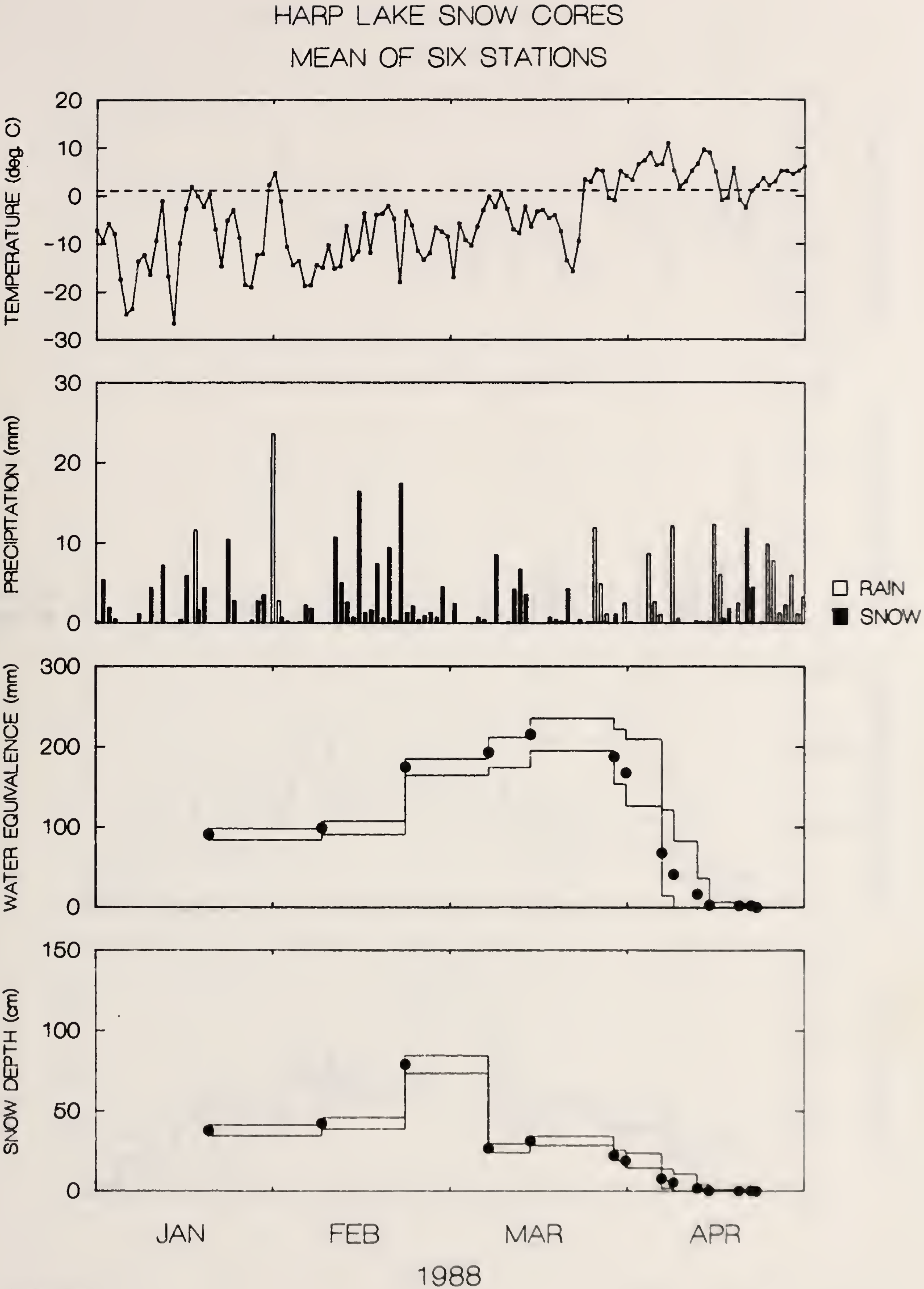

HARP LAKE SNOW CORES
MEAN OF SIX STATIONS
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
□ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
150
100
50
0
JAN
FEB
MAR
APR
1988

Figure 15

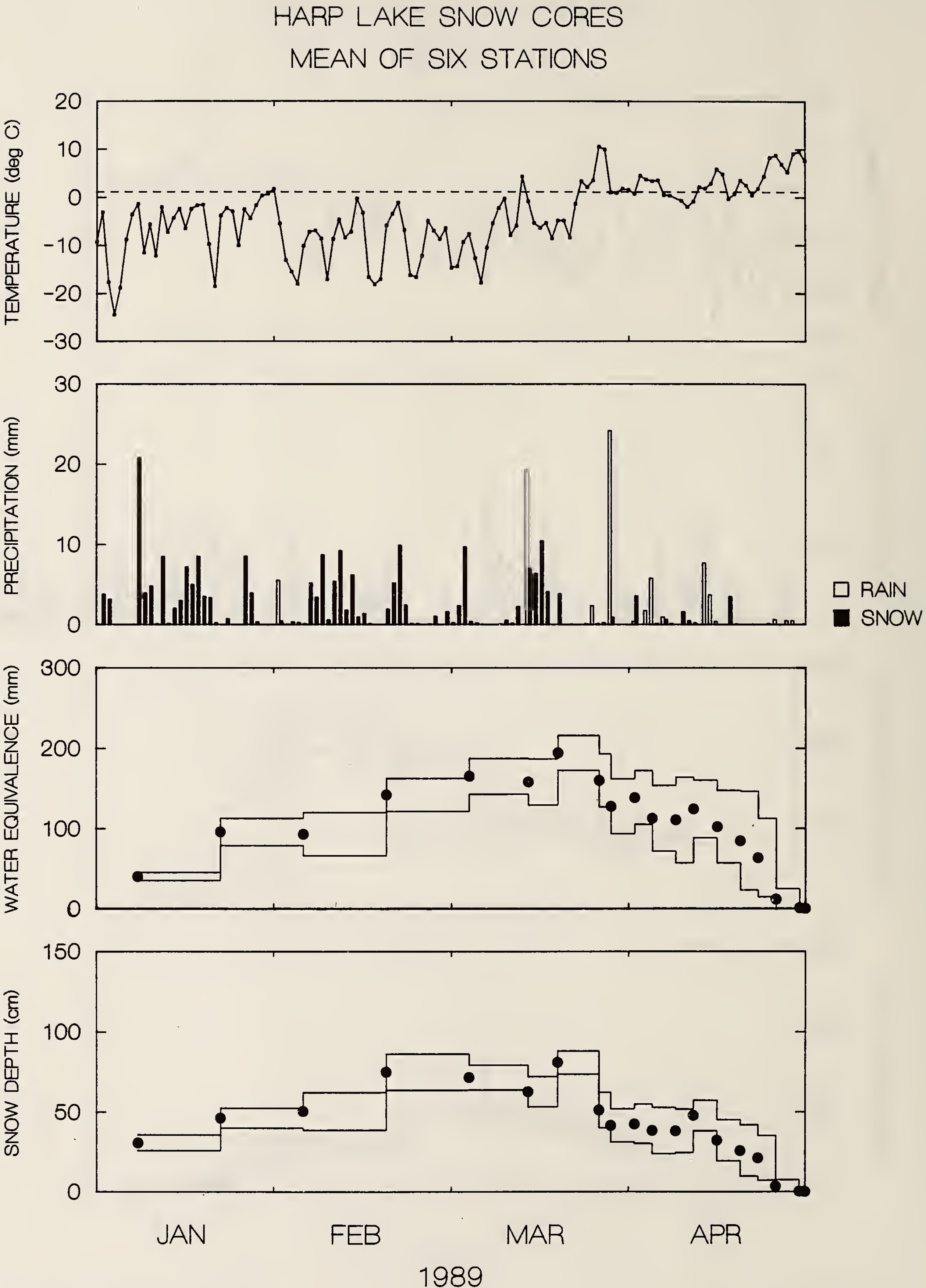


Figure 15 (cont'd)

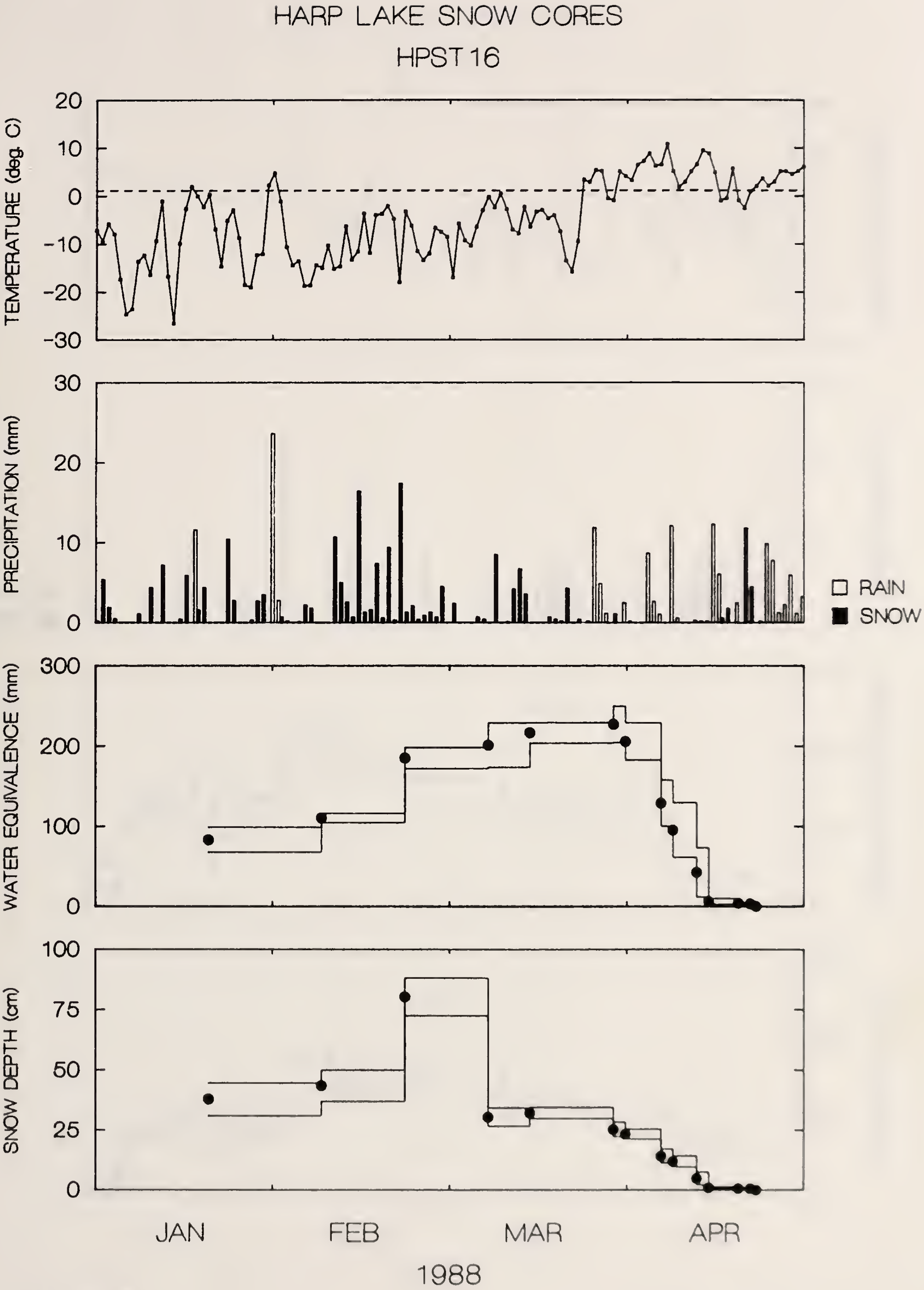

HARP LAKE SNOW CORES
HPST16
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
☐ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 16

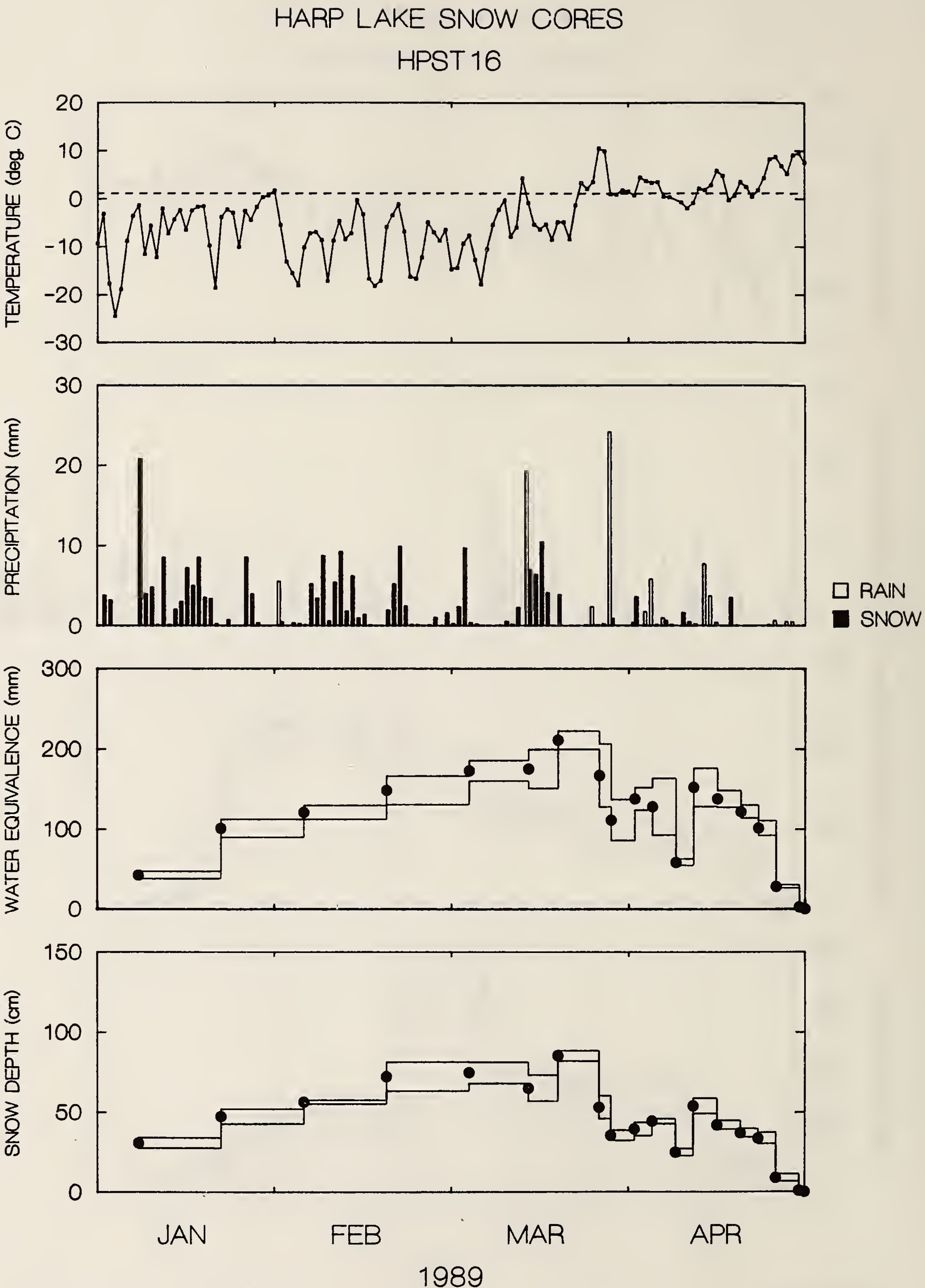
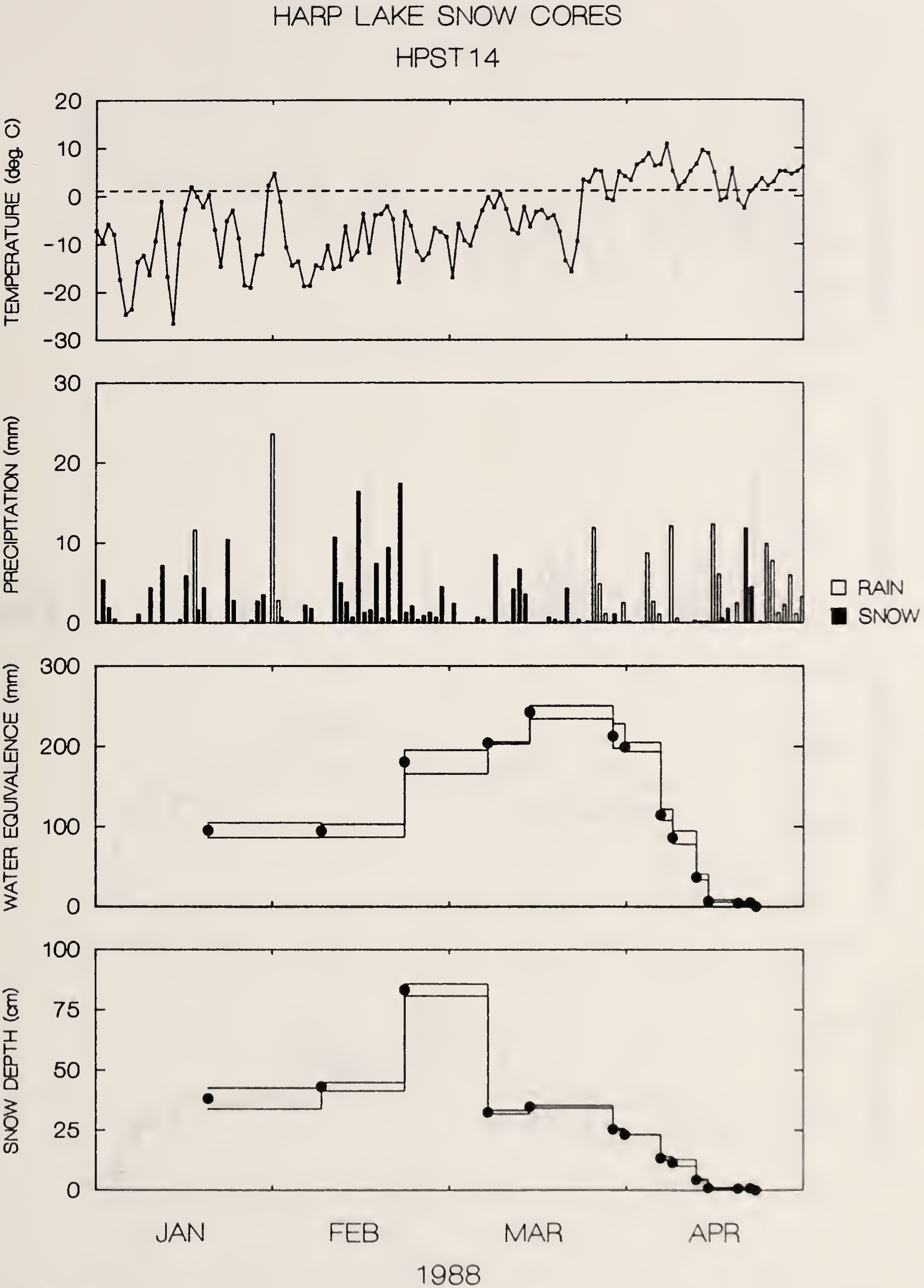


Figure 16 (cont'd)



HARP LAKE SNOW CORES
HPST14
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
□ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 17

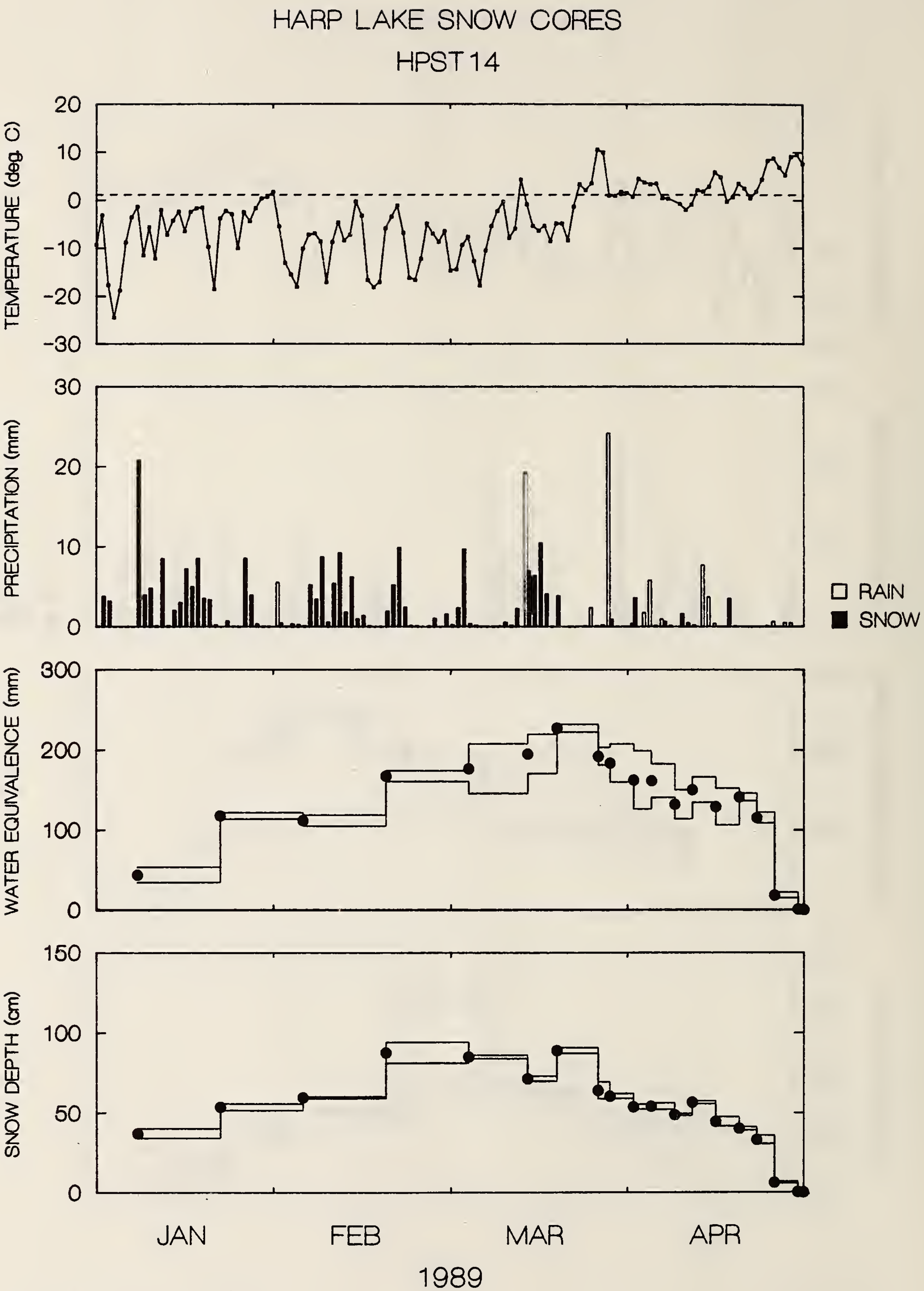


Figure 17 (cont'd)

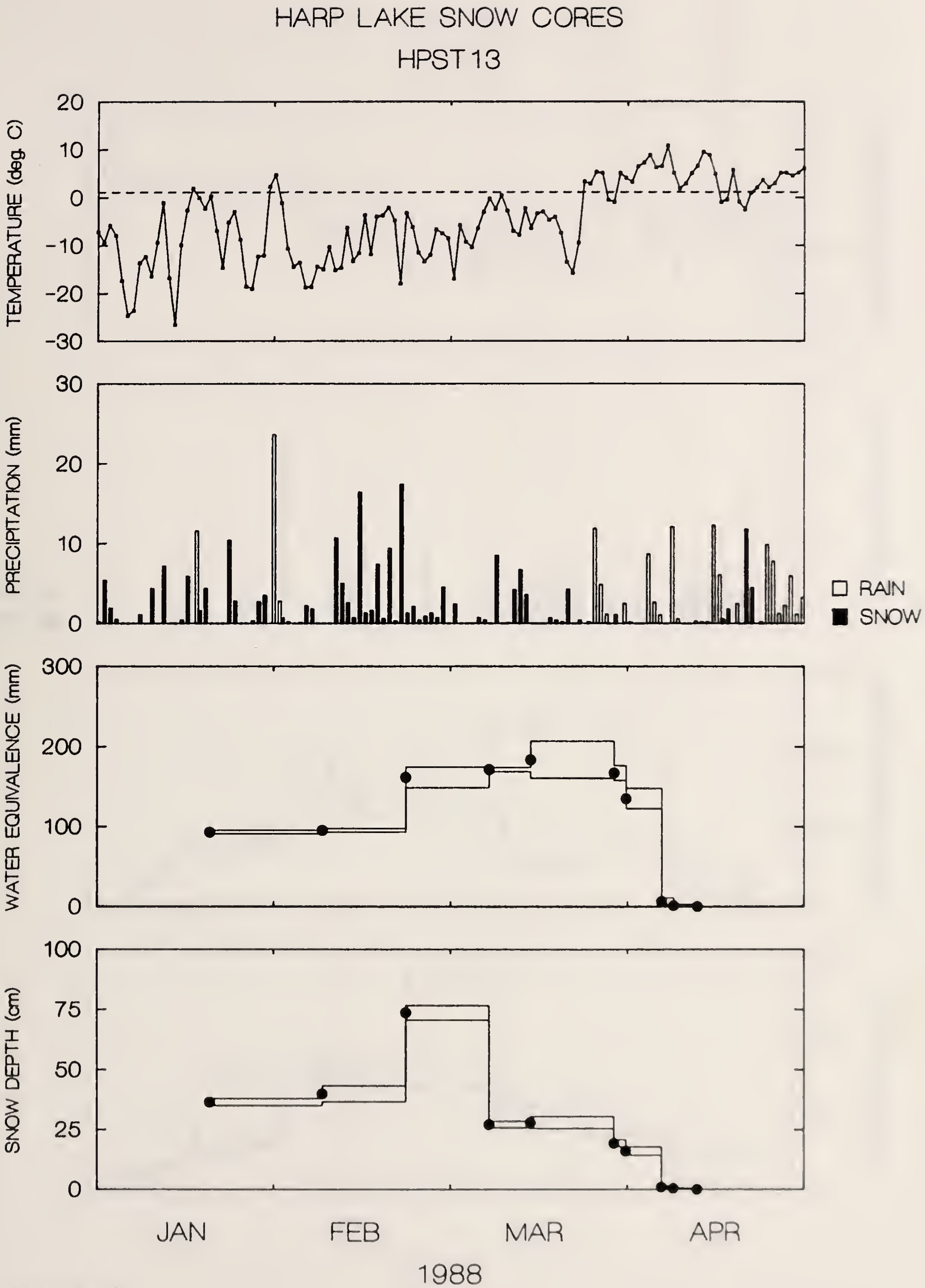

HARP LAKE SNOW CORES
HPST13
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
☐ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 18

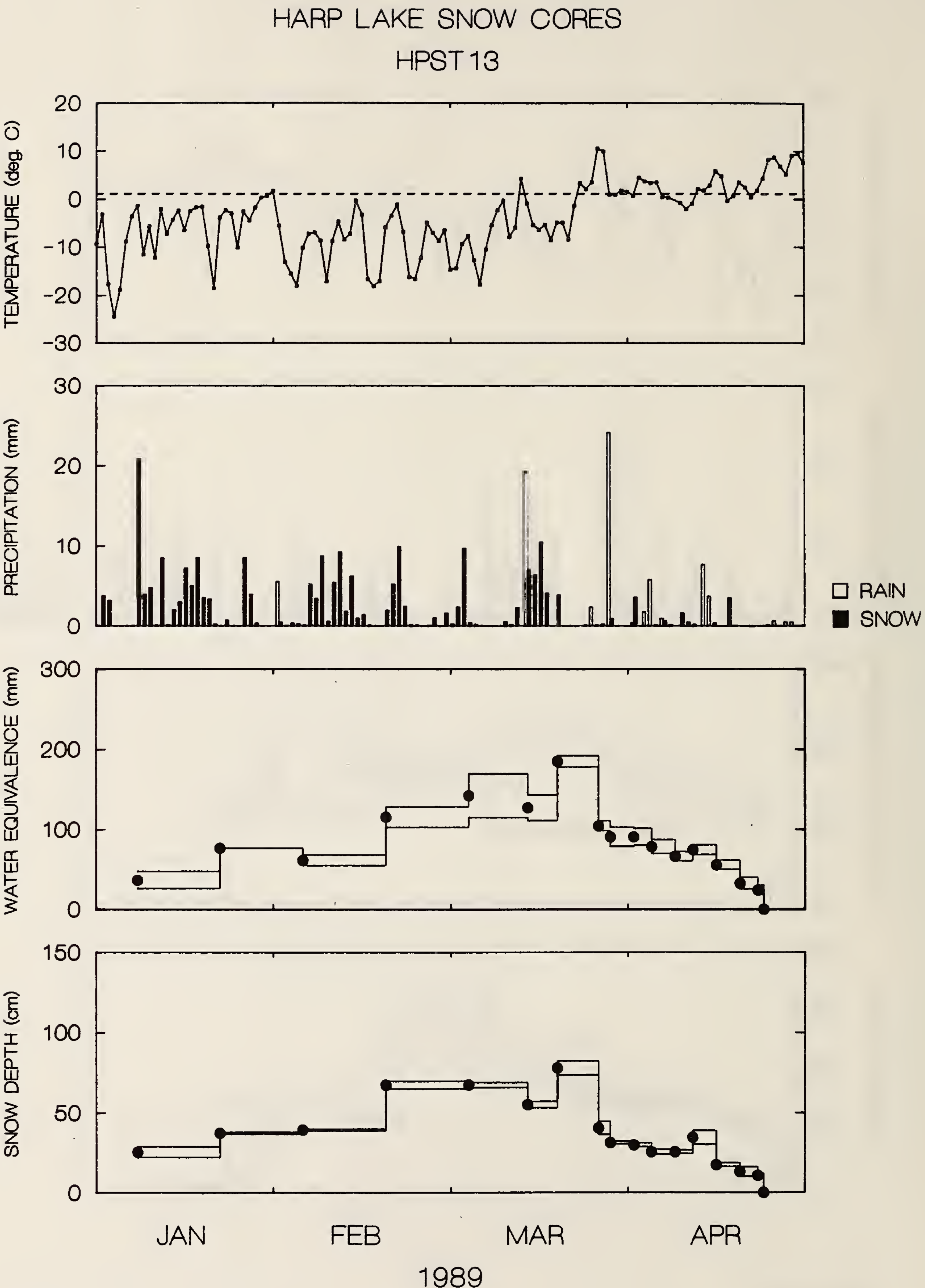


Figure 18 (cont'd)

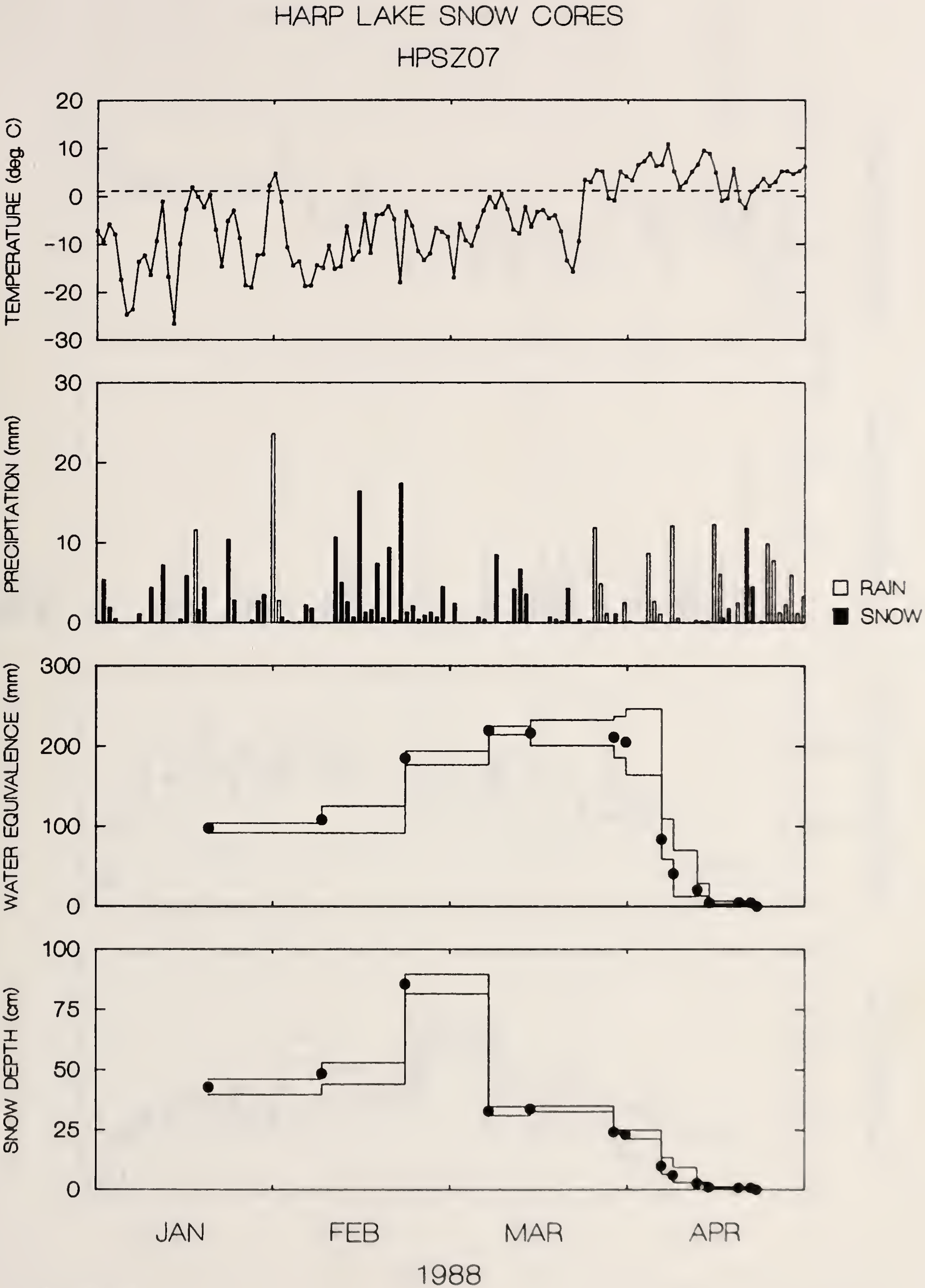

HARP LAKE SNOW CORES
HPSZ07
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
☐ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 19

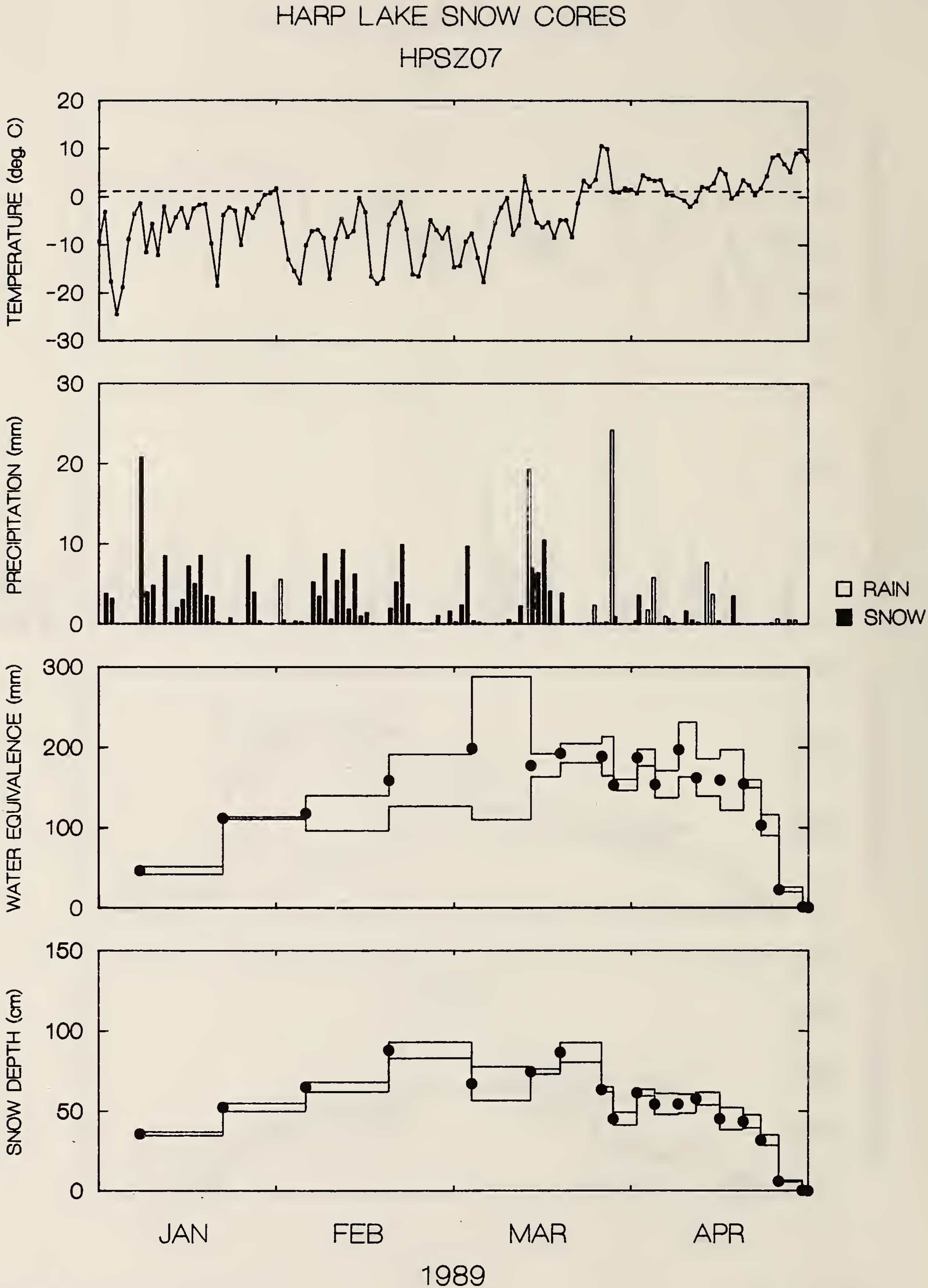


Figure 19 (cont'd)

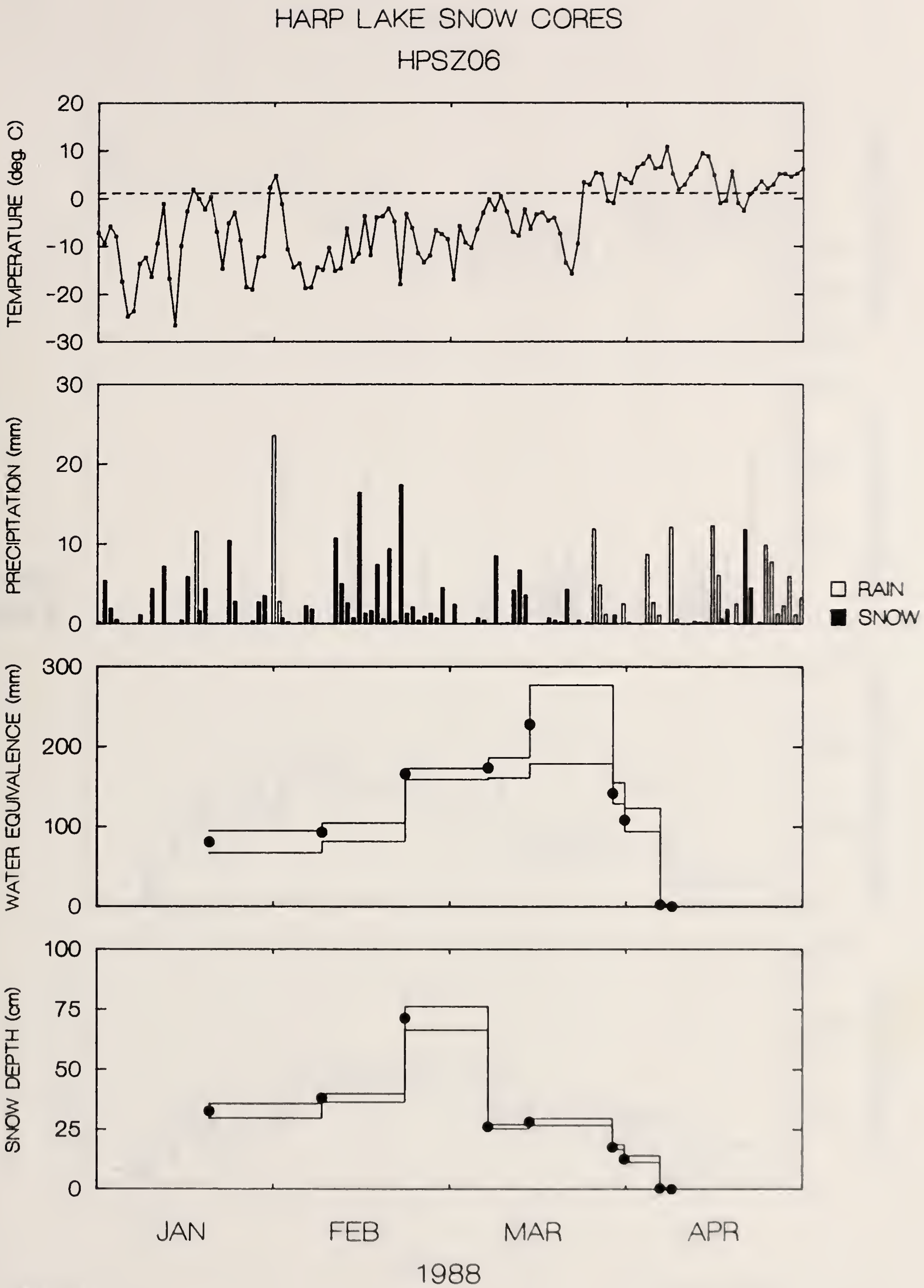

HARP LAKE SNOW CORES
HPSZ06
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
RAIN
SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 20

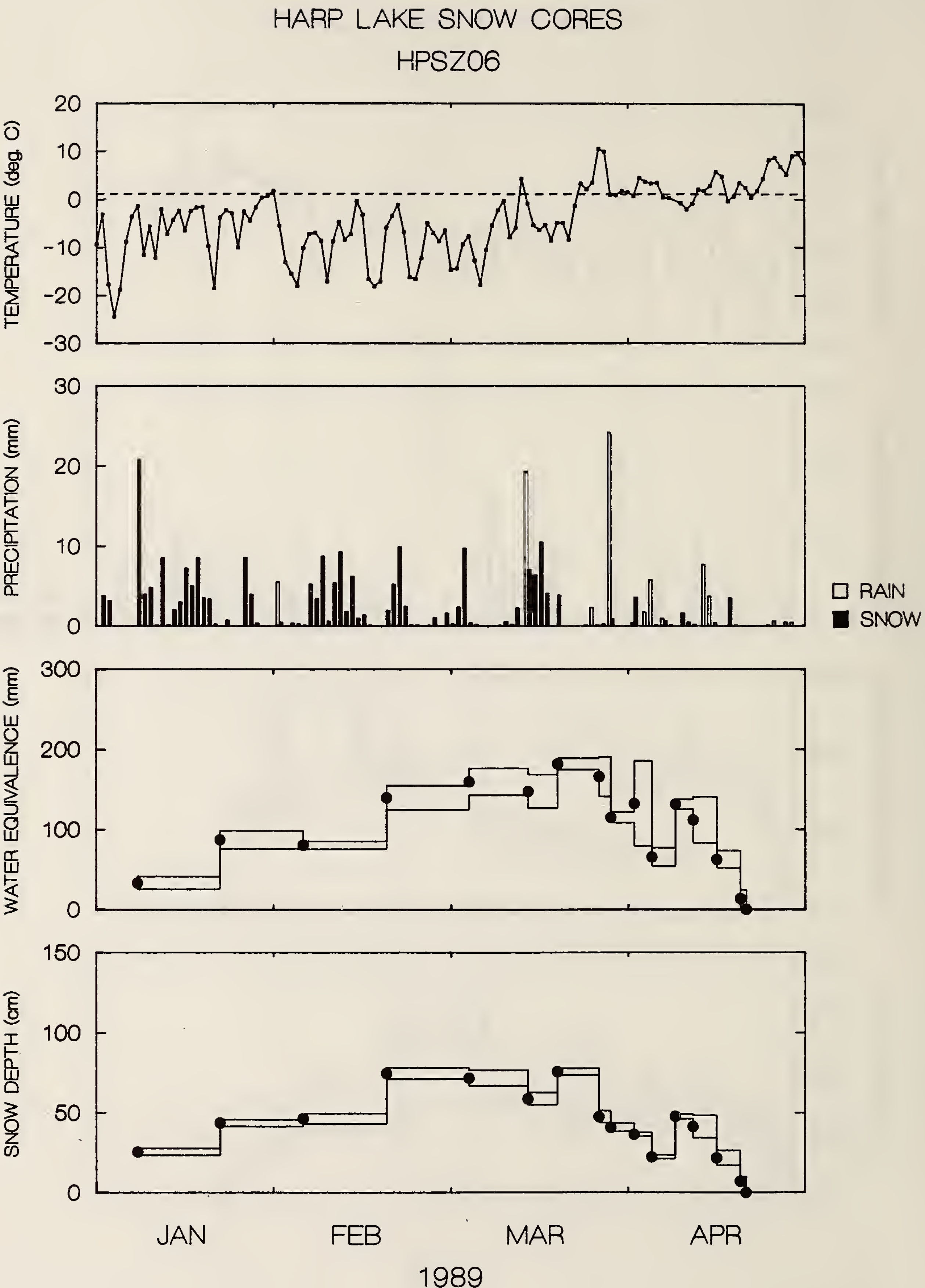


Figure 20 (cont'd)

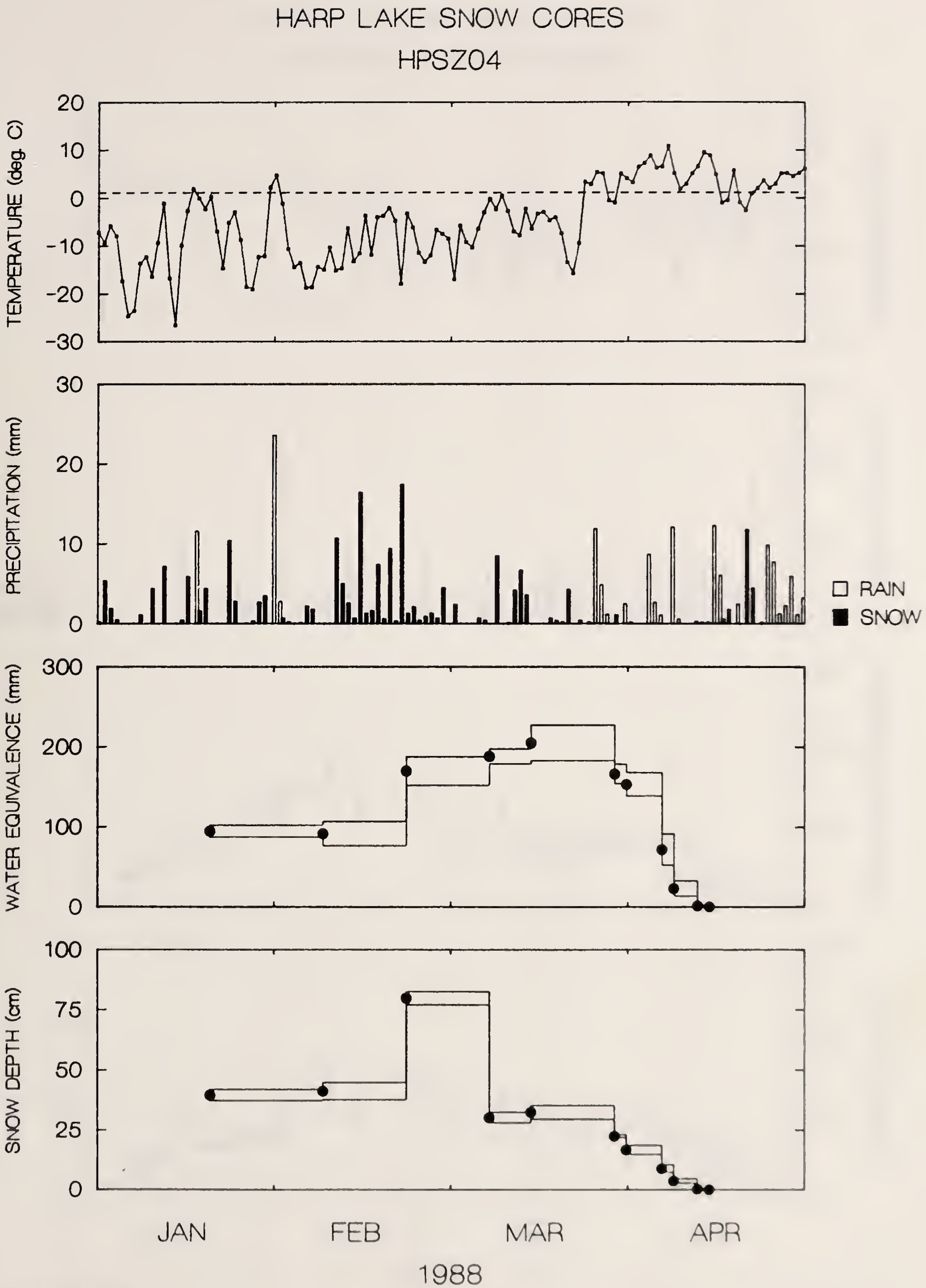

HARP LAKE SNOW CORES
HPSZ04
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
☐ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 21

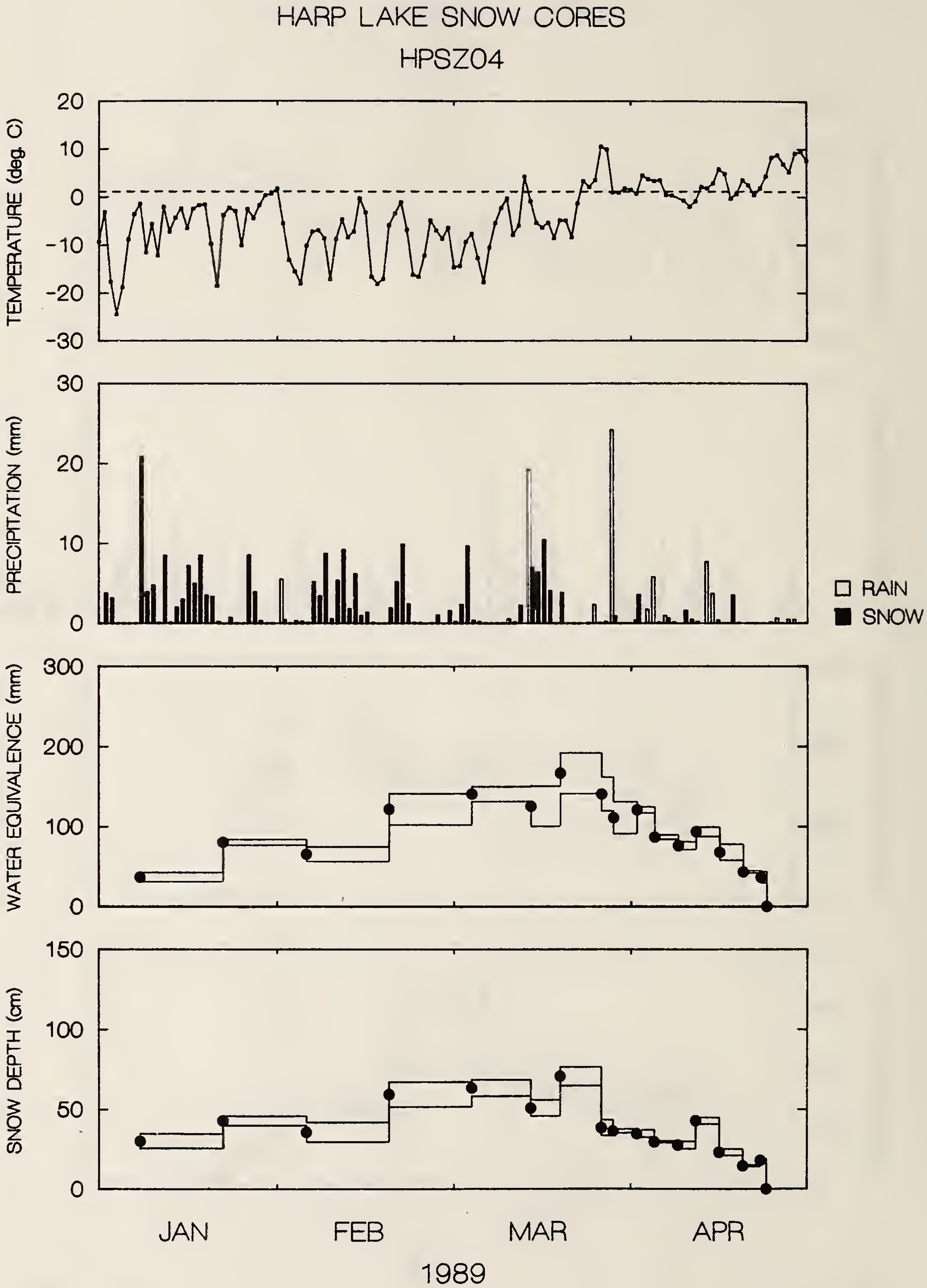


Figure 21 (cont'd)

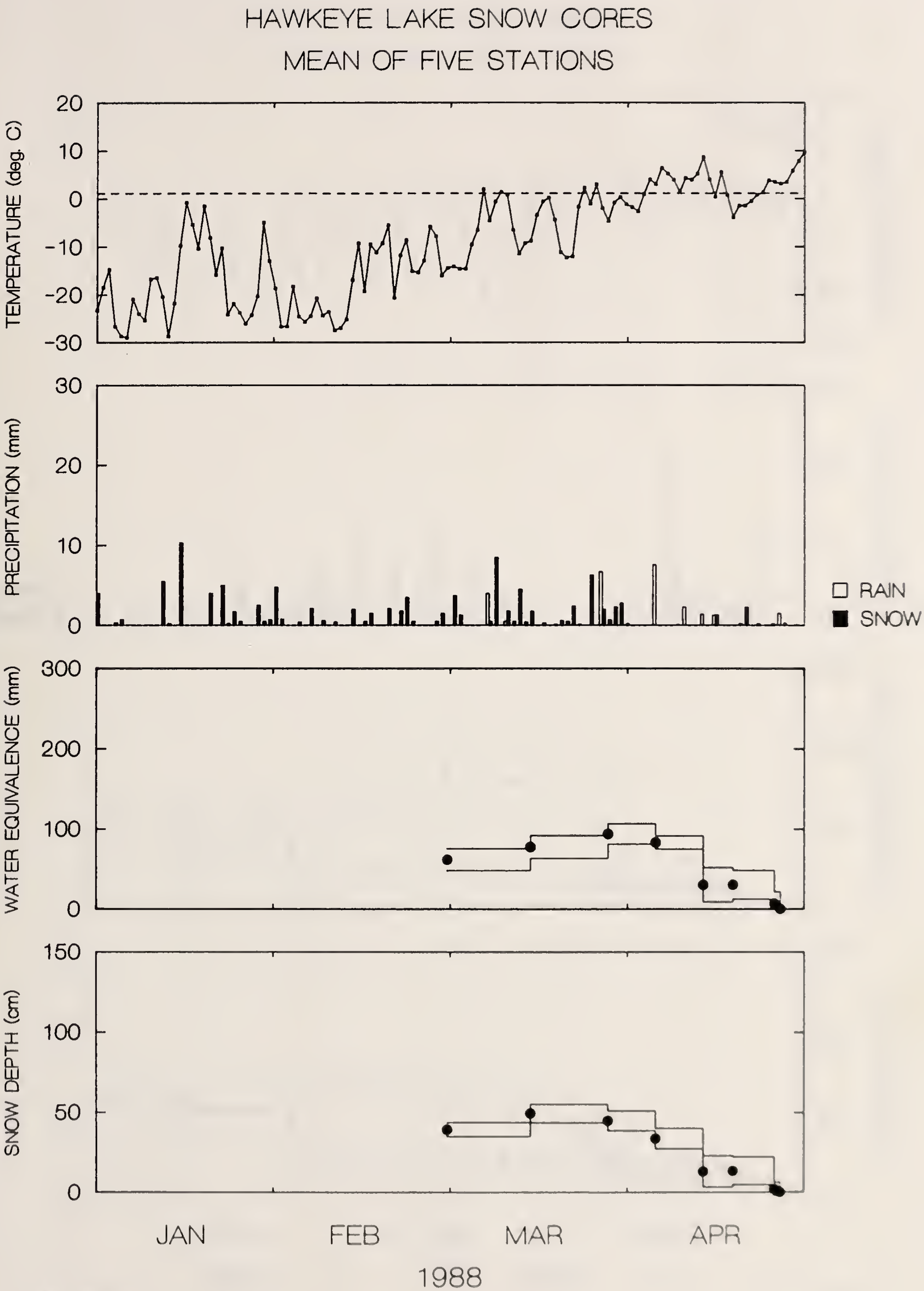

HAWKEYE LAKE SNOW CORES
MEAN OF FIVE STATIONS
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
□ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
150
100
50
0
JAN
FEB
MAR
APR
1988

Figure 22

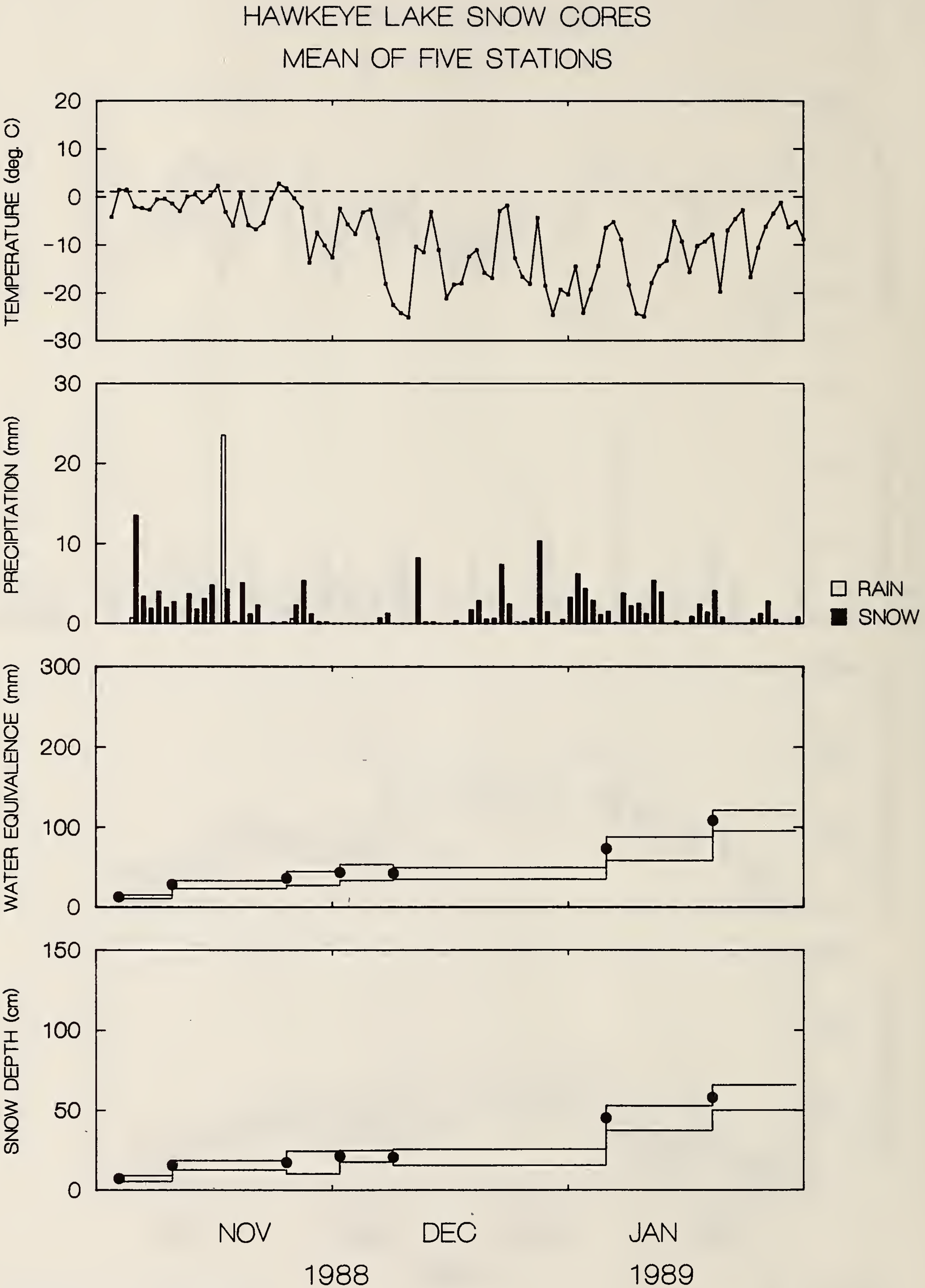


Figure 22 (cont'd)

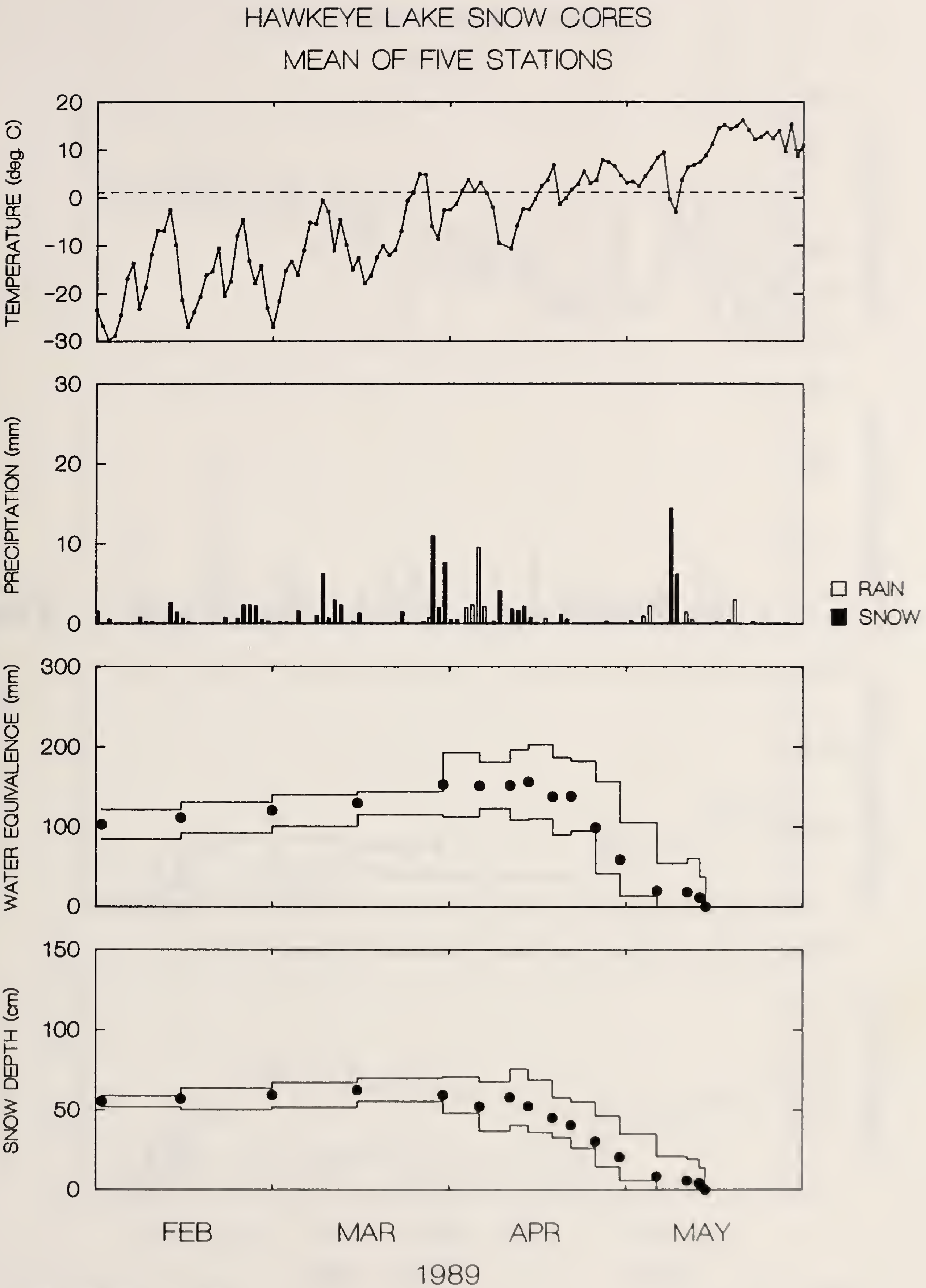


Figure 22 (cont'd)

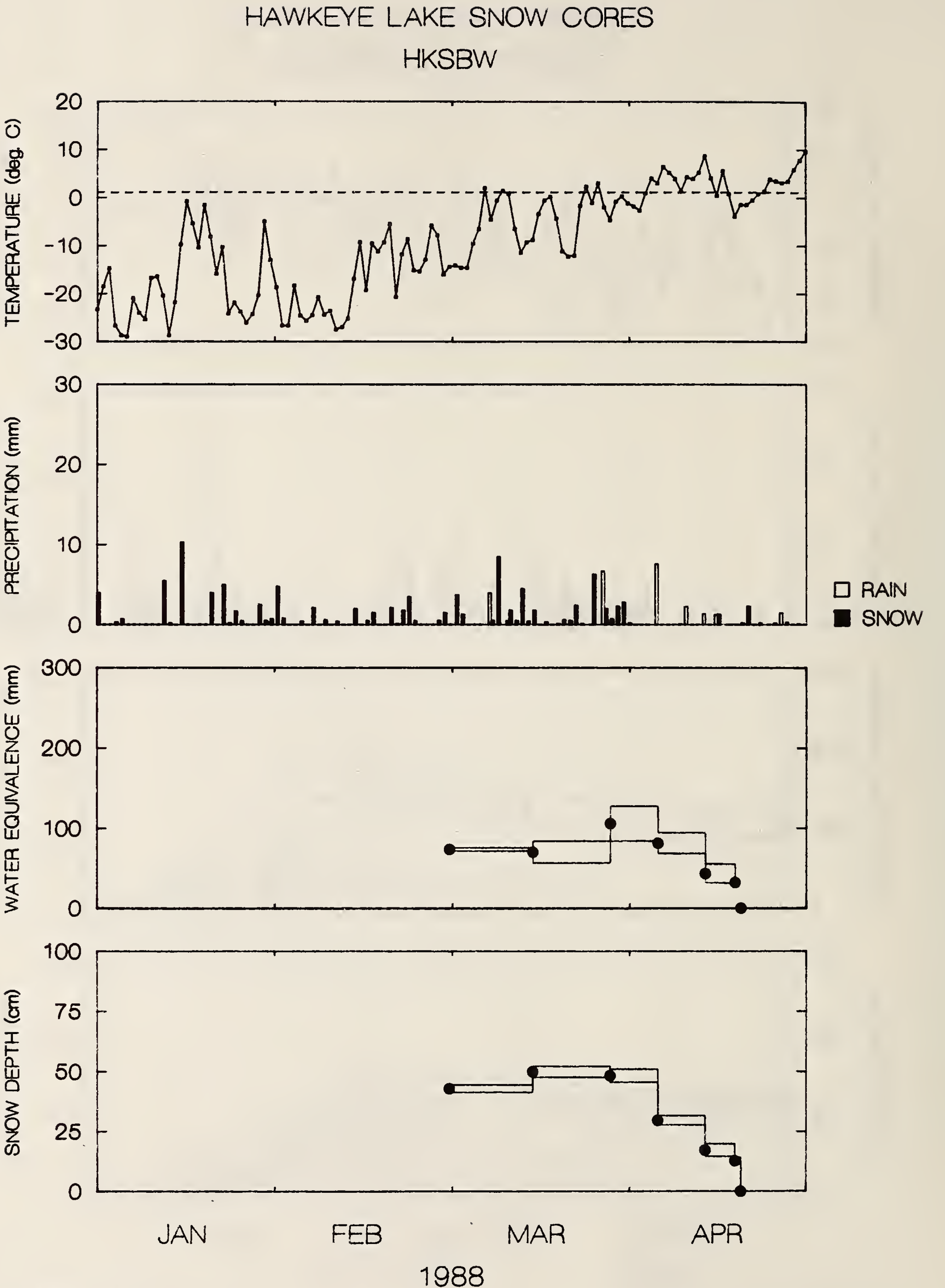

HAWKEYE LAKE SNOW CORES
HKSBW
TEMPERATURE (deg C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
□ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 23

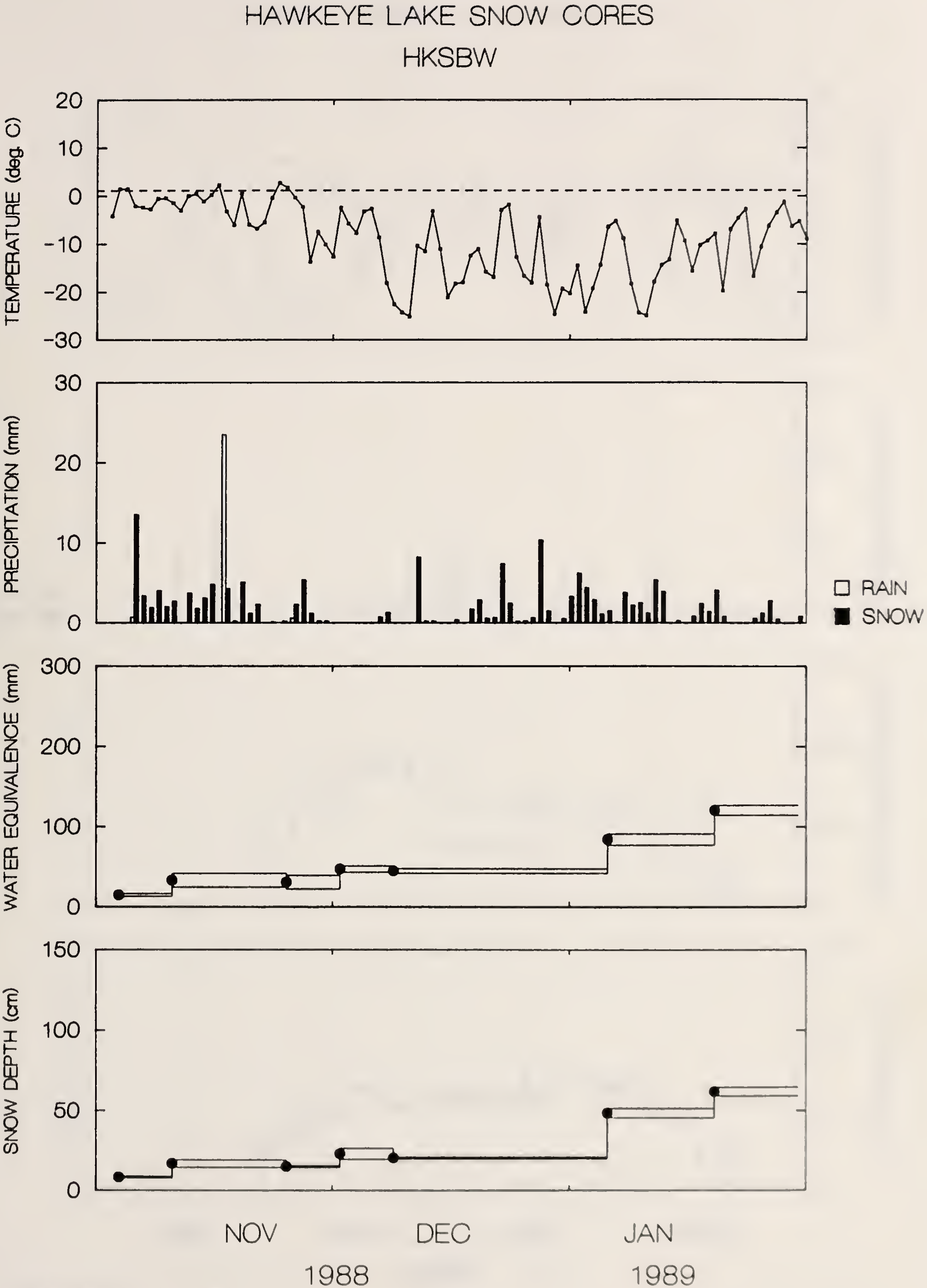


Figure 23 (cont'd)

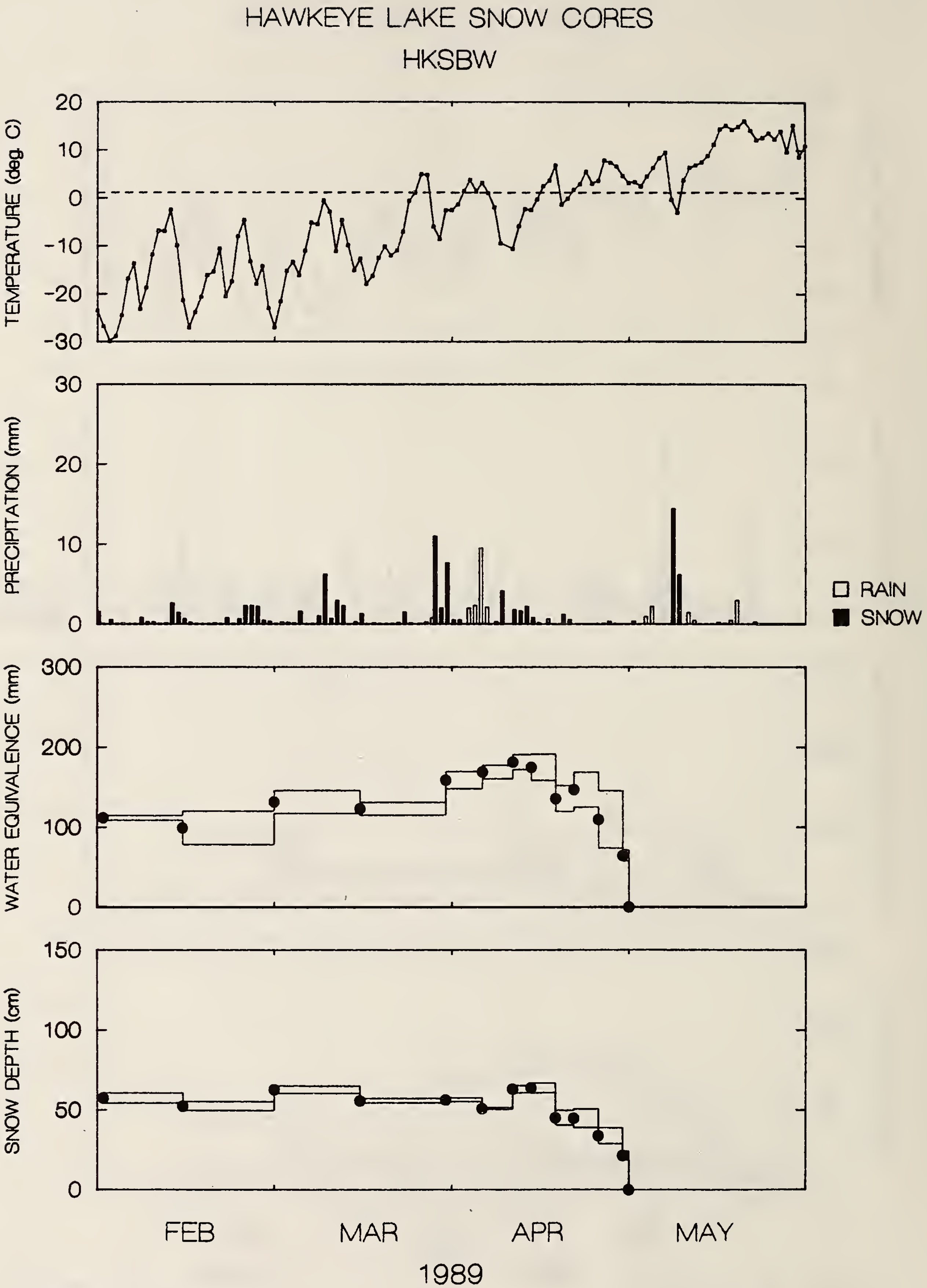


Figure 23 (cont'd)

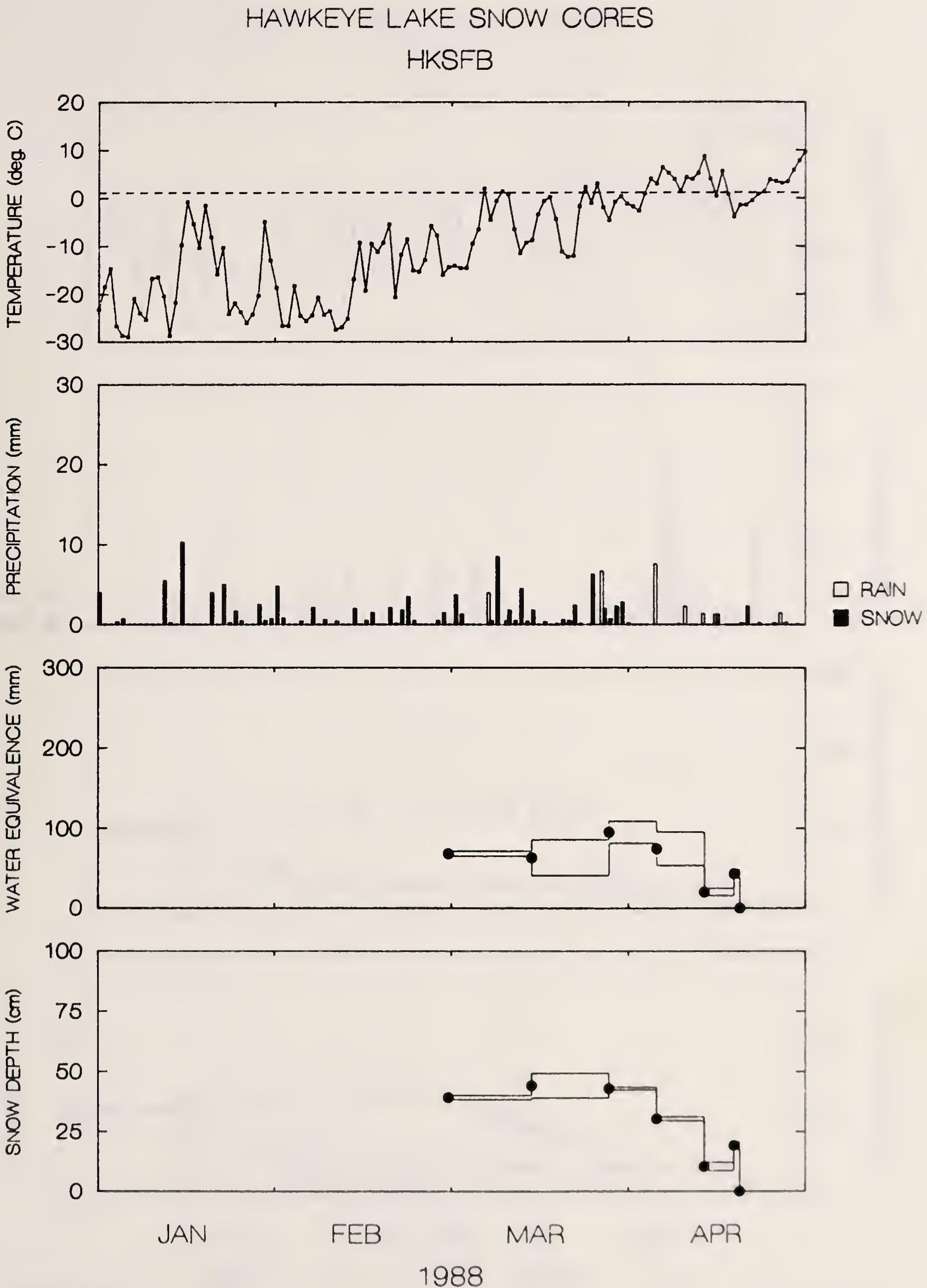

HAWKEYE LAKE SNOW CORES
HKSFB
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
RAIN
SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 24

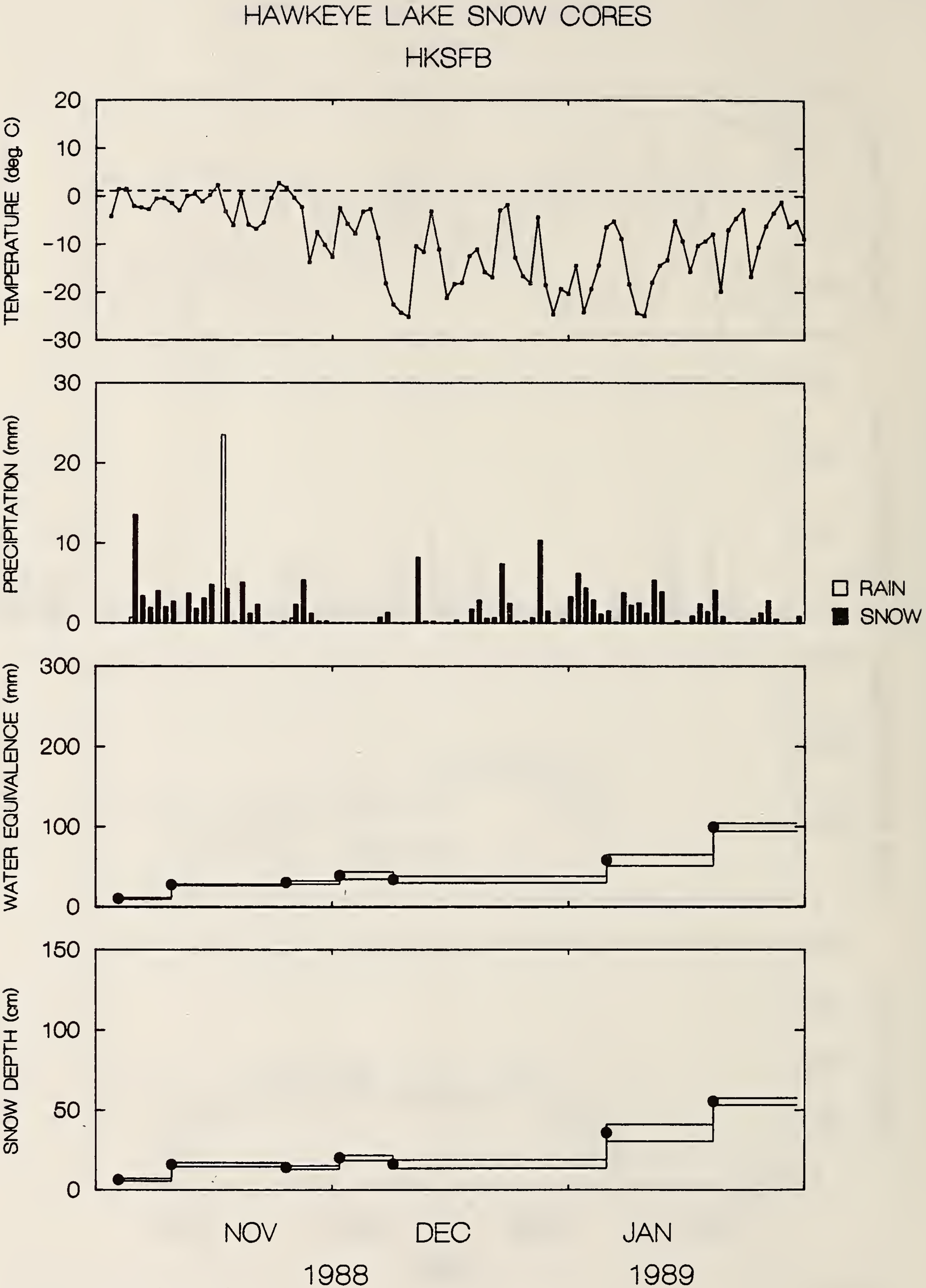


Figure 24 (cont'd)

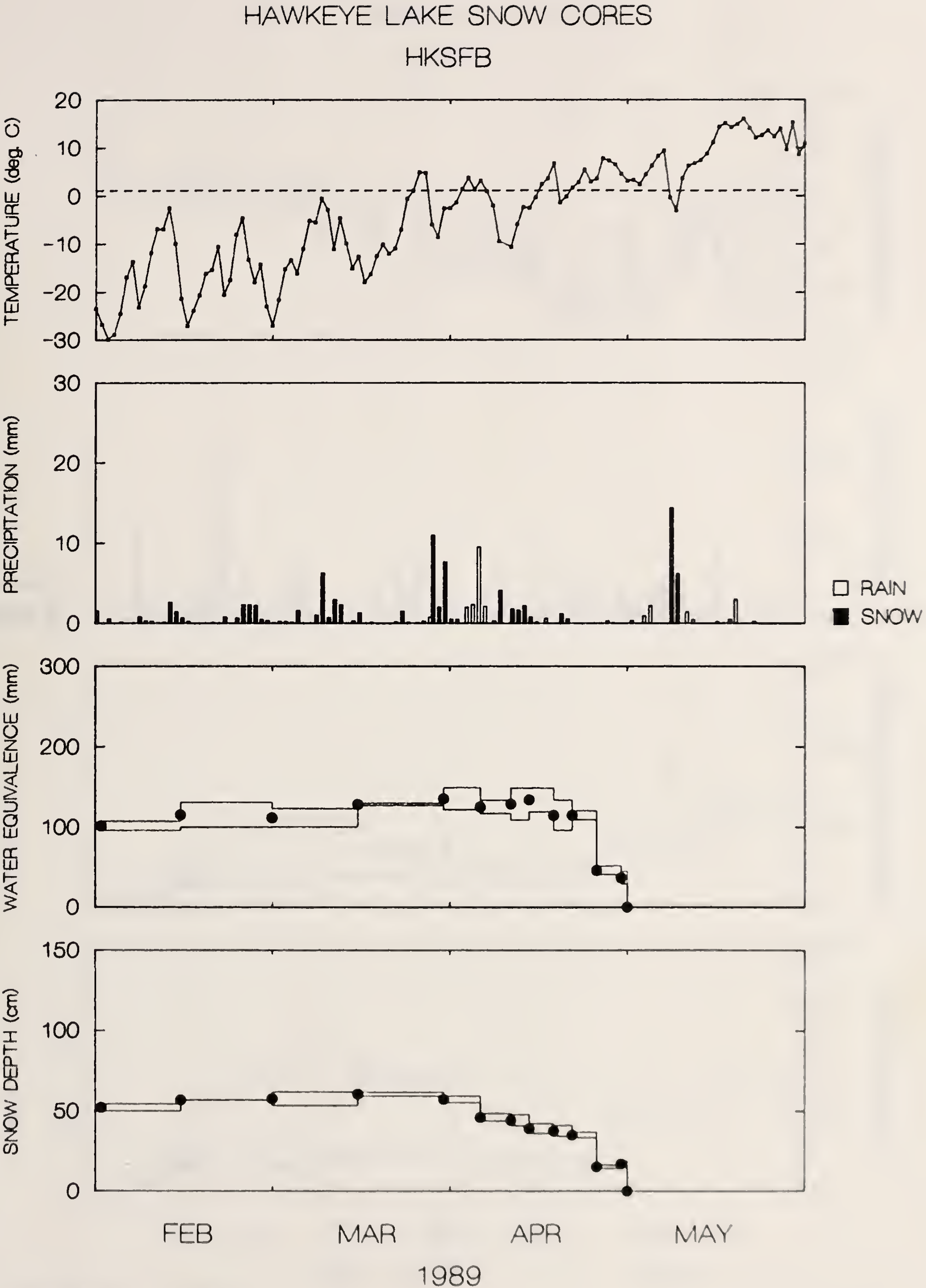


Figure 24 (cont'd)

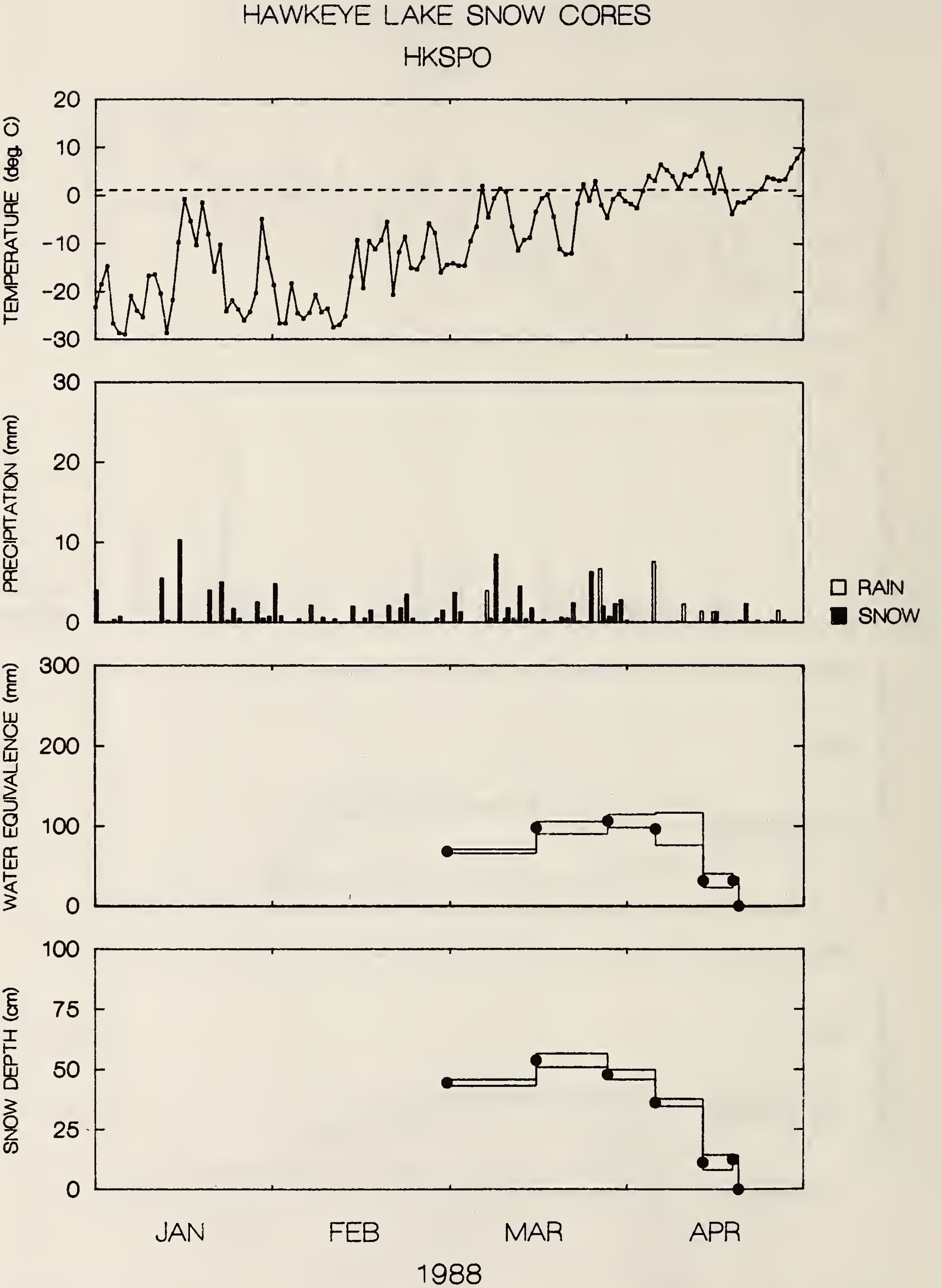

HAWKEYE LAKE SNOW CORES
HKSPO
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
☐ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 25

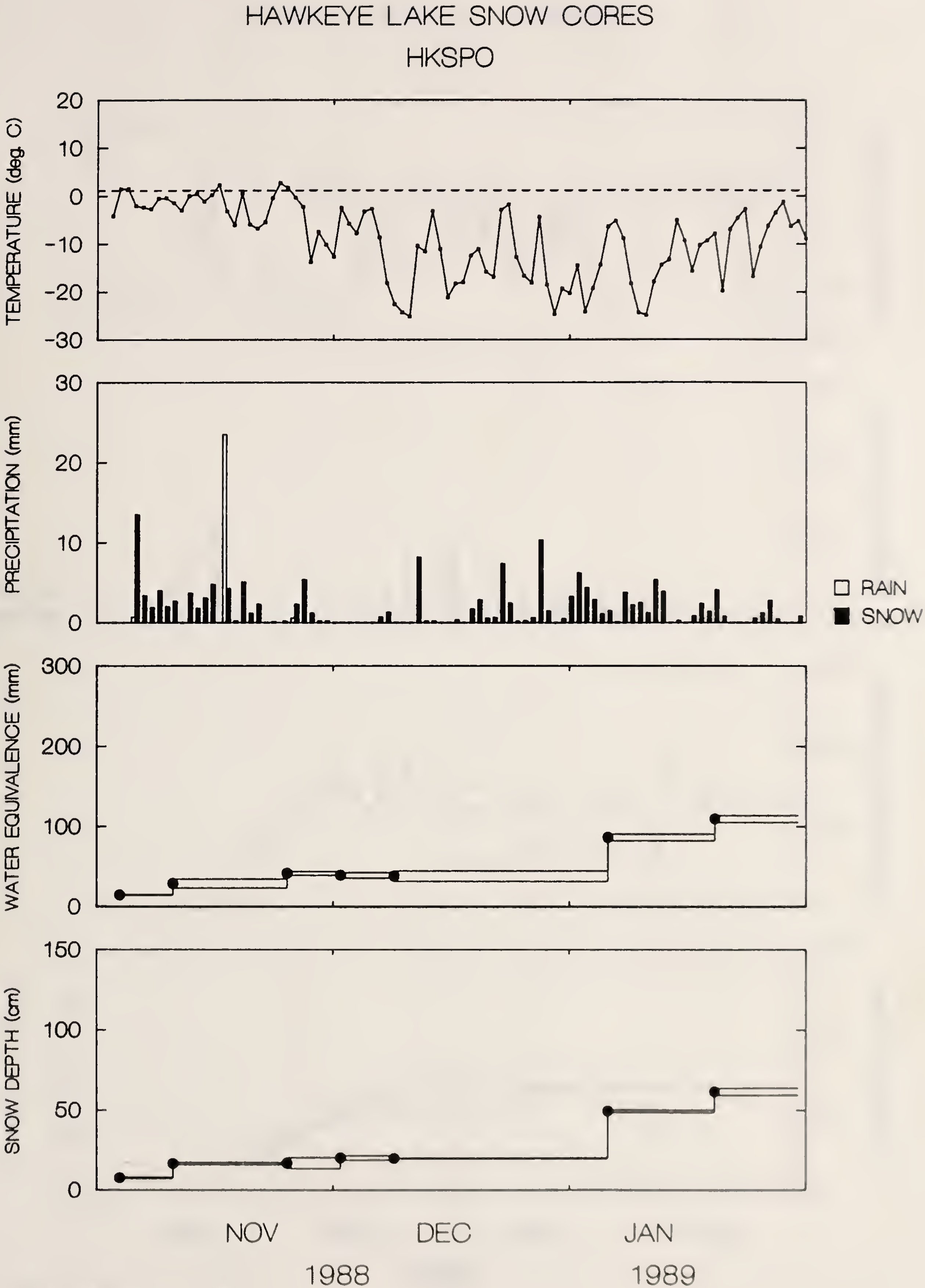


Figure 25 (cont'd)

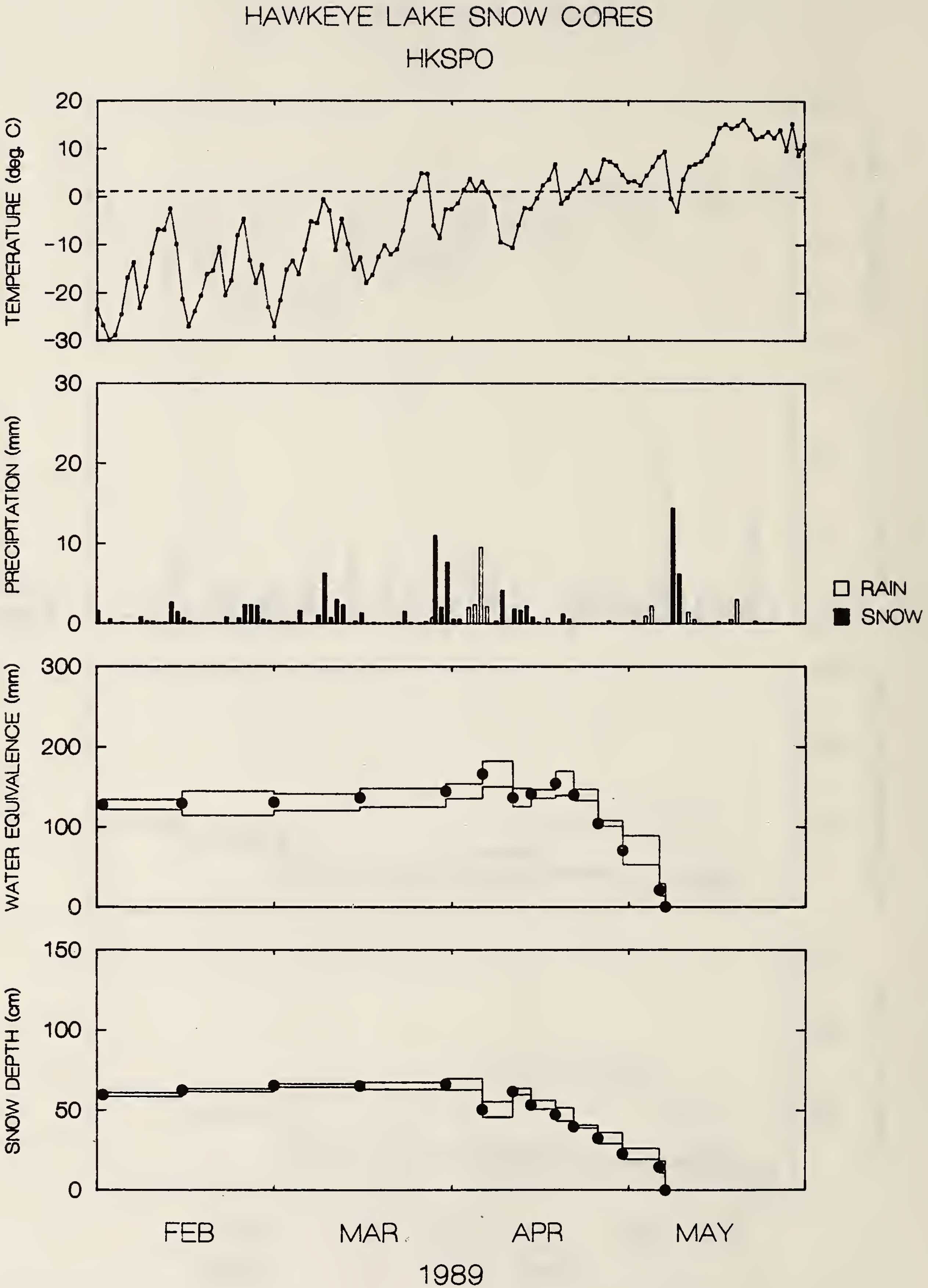


Figure 25 (cont'd)

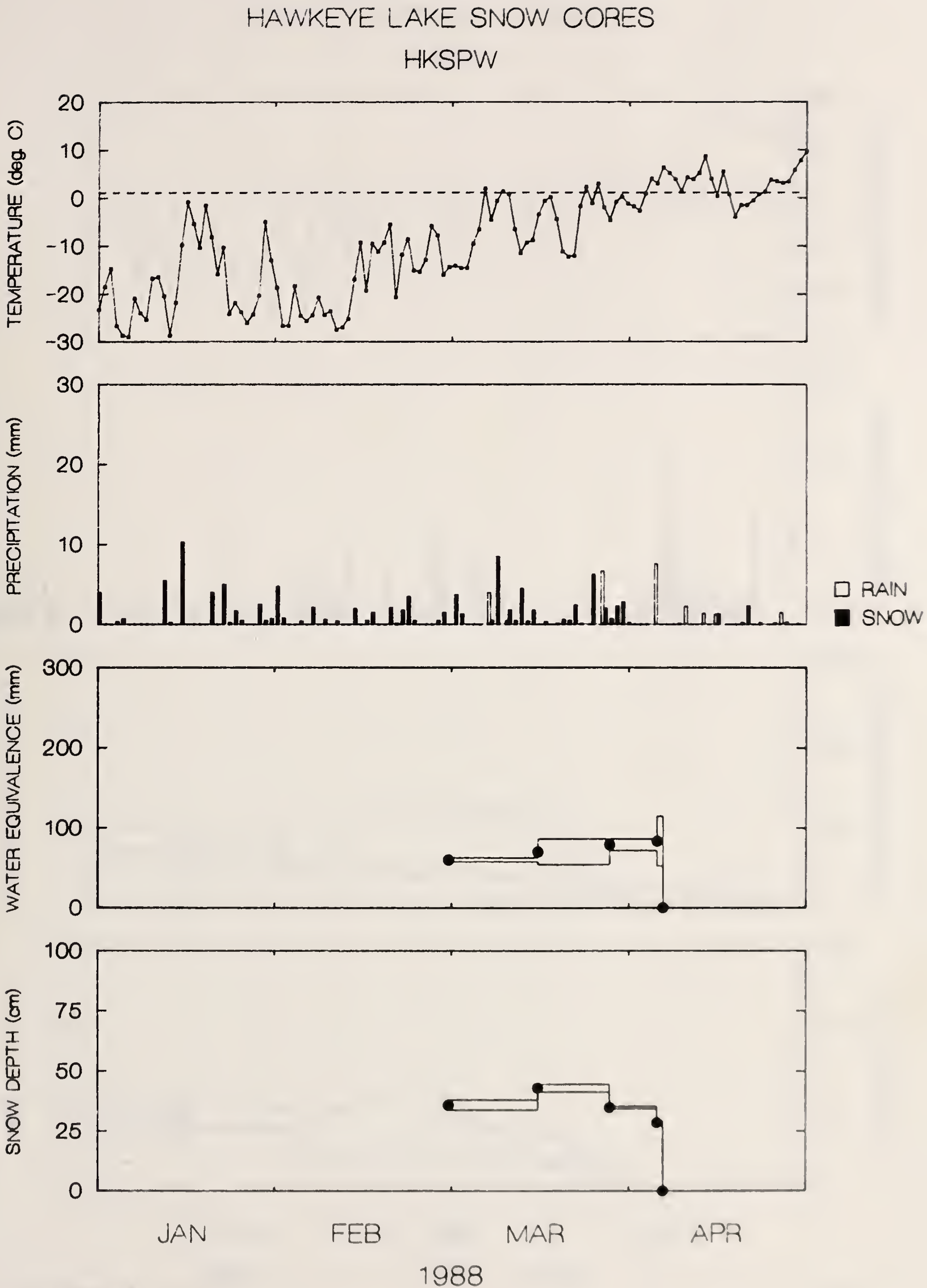

HAWKEYE LAKE SNOW CORES
HKSPW
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
☐ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 26

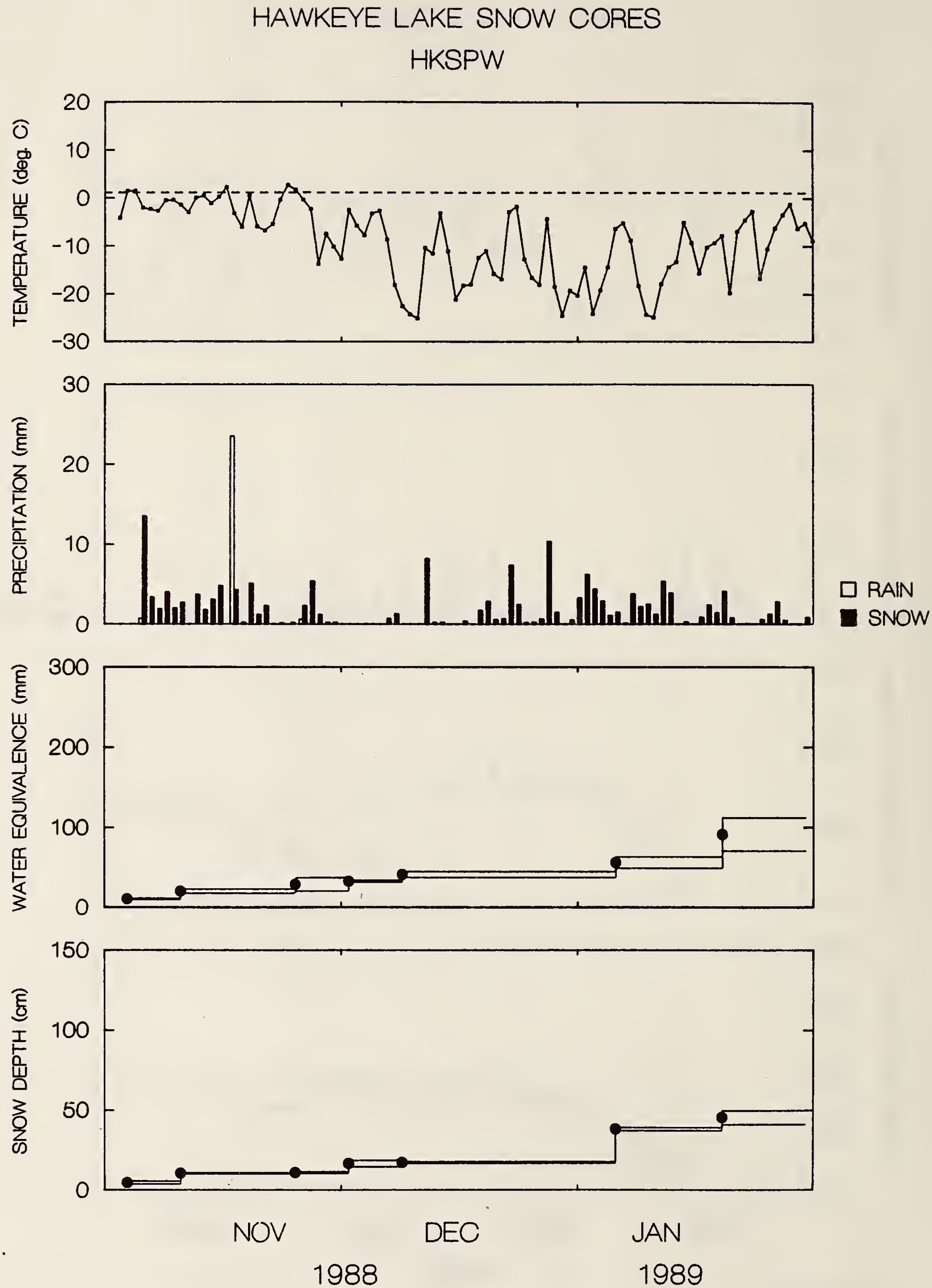


Figure 26 (cont'd)

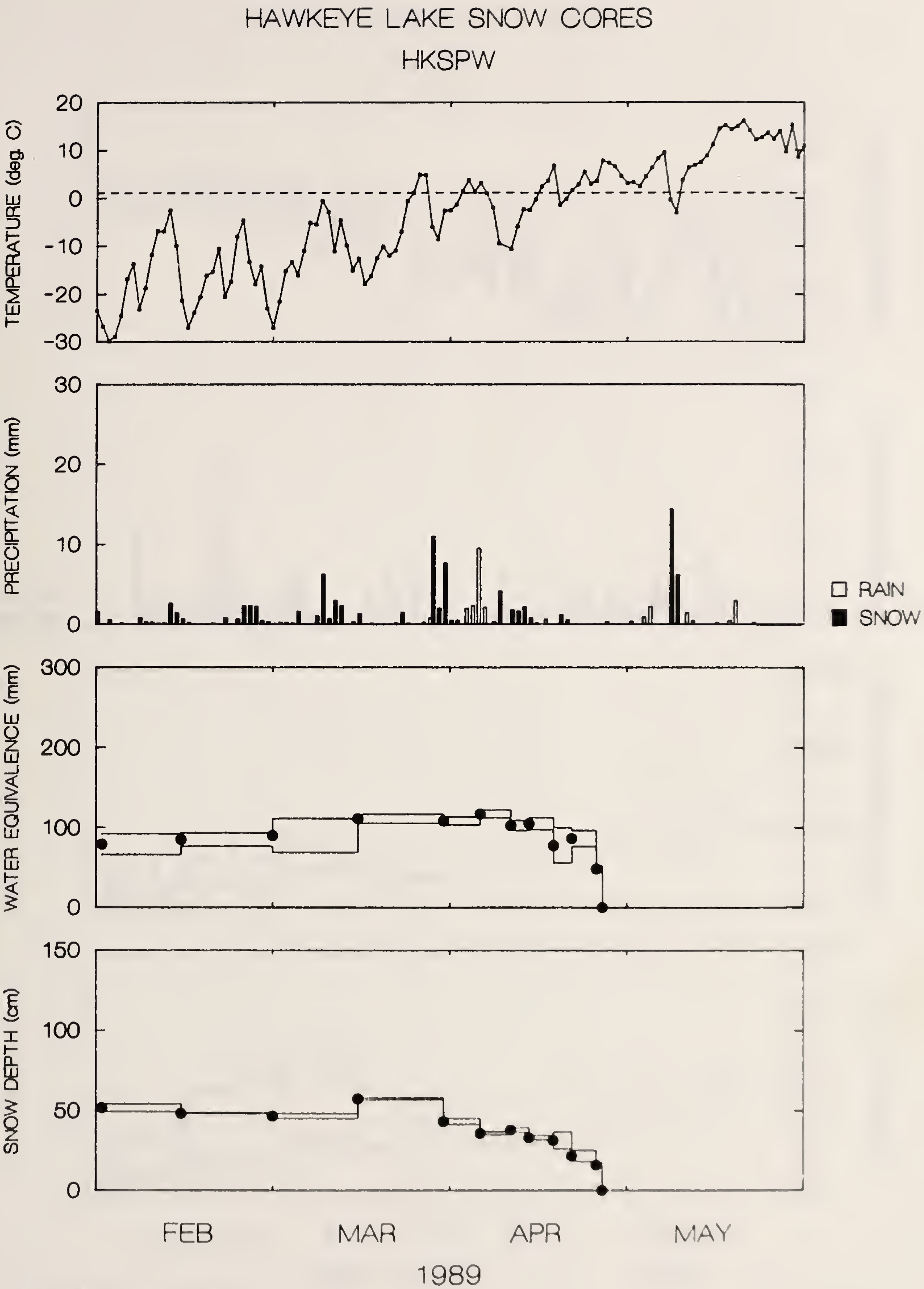


Figure 26 (cont'd)

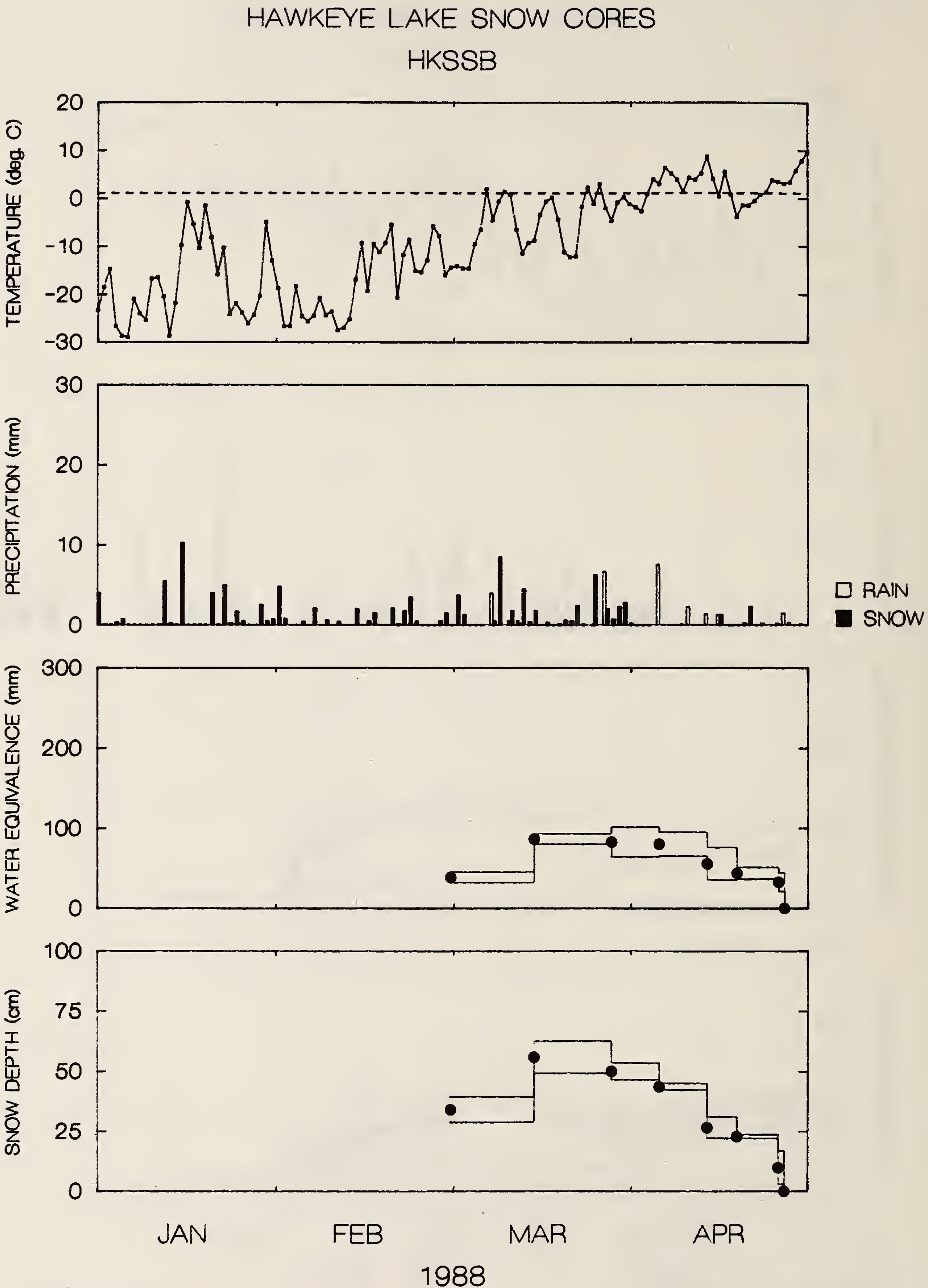

HAWKEYE LAKE SNOW CORES
HKSSB
TEMPERATURE (deg. C)
20
10
0
-10
-20
-30
PRECIPITATION (mm)
30
20
10
0
☐ RAIN
■ SNOW
WATER EQUIVALENCE (mm)
300
200
100
0
SNOW DEPTH (cm)
100
75
50
25
0
JAN
FEB
MAR
APR
1988

Figure 27

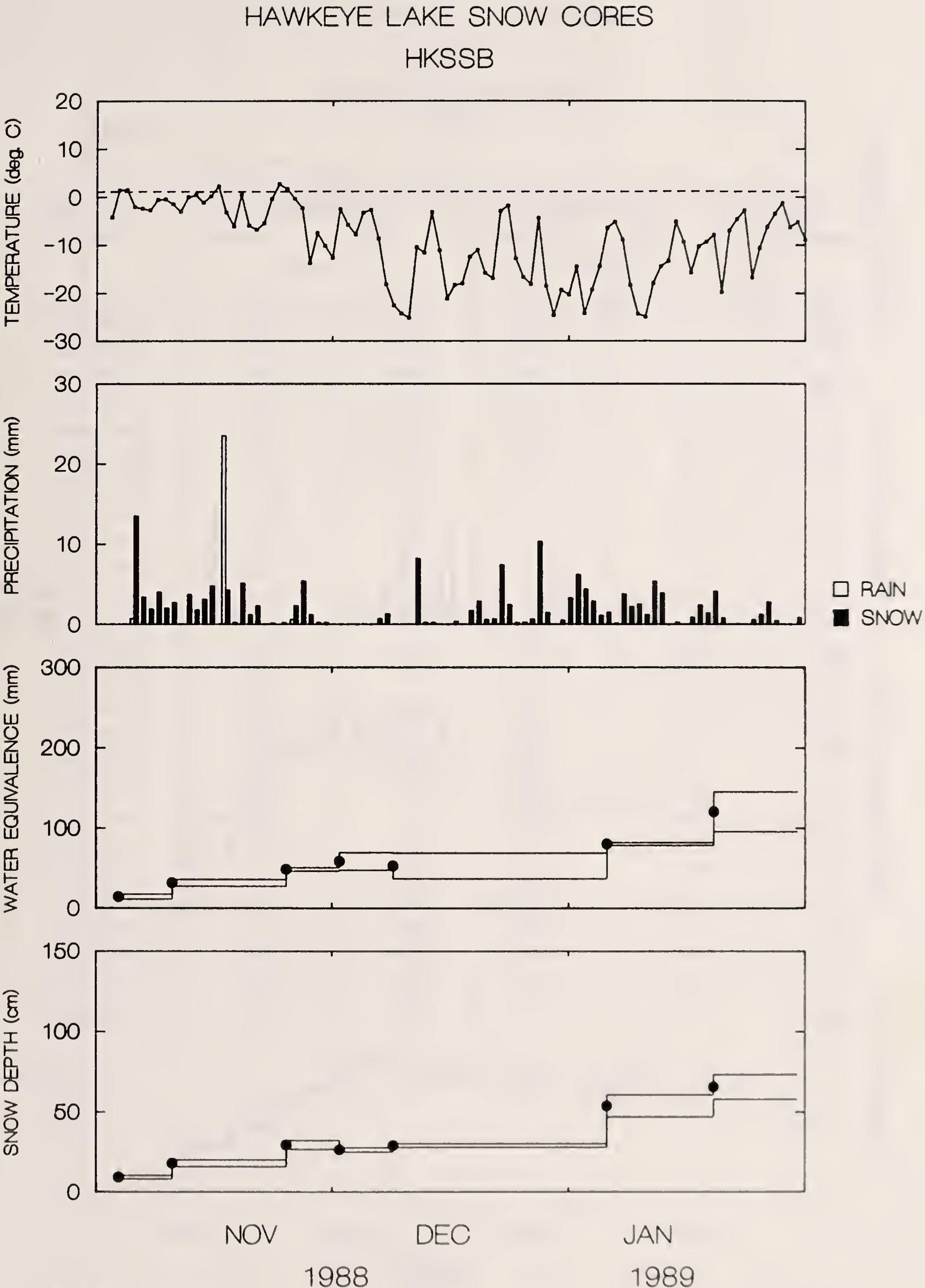


Figure 27 (cont'd)

HAWKEYE LAKE SNOW CORES
HKSSB

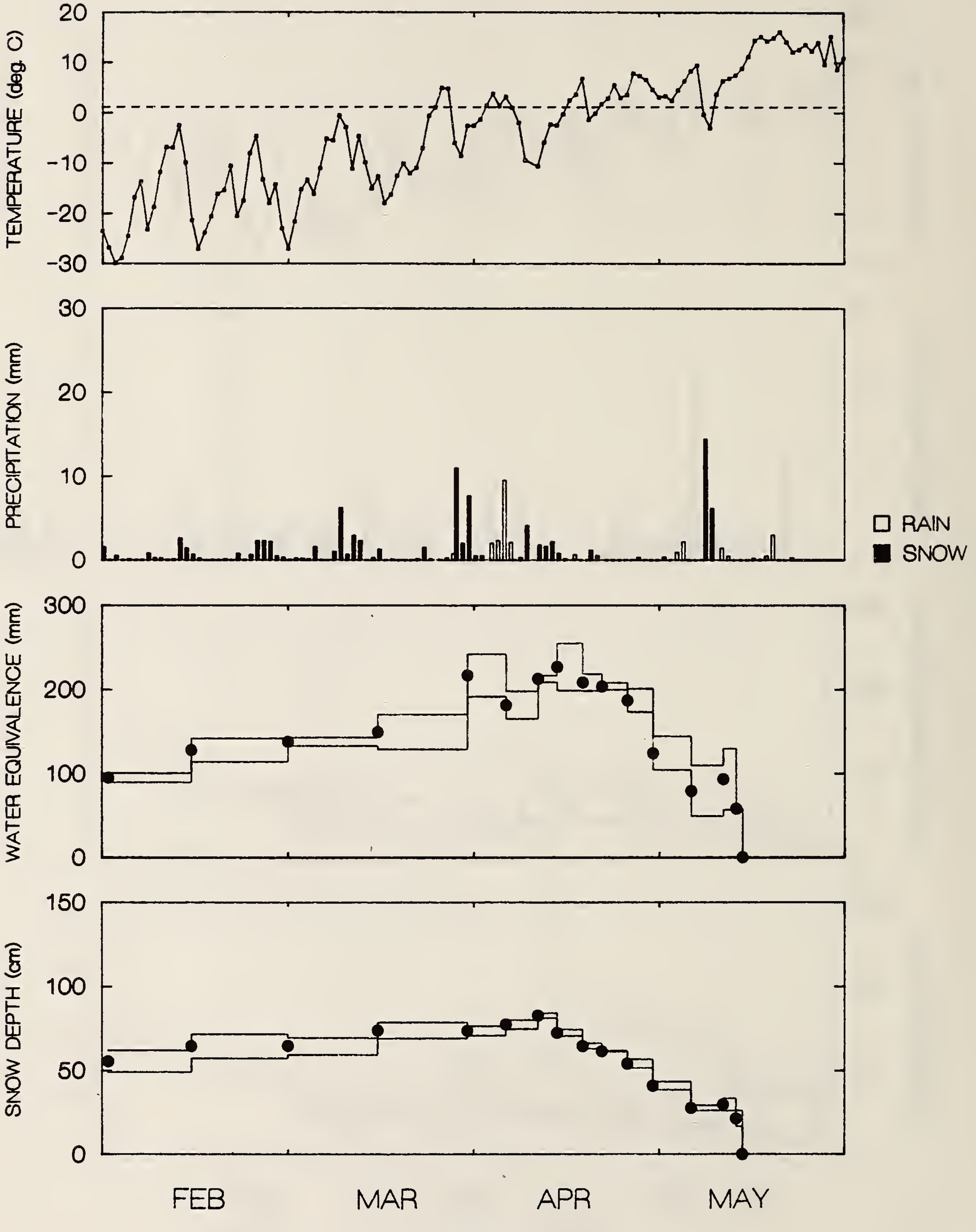


Figure 27 (cont'd)

PLASTIC LAKE SNOW CORES
PCST16

SAMPLING DATE	SNOW DEPTH		WATER EQUIVALENCE		PERCENT COVERAGE
	MEAN (cm)	S.D.	MEAN (mm)	S.D.	
22-JAN-88	29.17	18.20	72.06	3.40	100%
08-FEB-88	27.67	11.31	54.48	3.06	100%
22-FEB-88	56.83	16.10	119.44	8.46	100%
07-MAR-88	54.33	24.26	140.84	6.43	100%
14-MAR-88	23.00	21.87	147.72	2.18	100%
28-MAR-88	13.77	35.10	110.27	4.31	100%
30-MAR-88	10.87	20.68	88.87	2.61	100%
05-APR-88	1.27	4.17	8.90	0.18	33%
07-APR-88	0.27	0.40	1.70	0.03	10%
10-JAN-89	22.67	11.54	41.49	1.53	100%
24-JAN-89	30.00	6.88	53.72	5.29	100%
07-FEB-89	31.33	18.67	54.48	5.51	100%
21-FEB-89	51.33	9.99	99.57	6.66	100%
07-MAR-89	54.33	4.77	103.39	1.53	100%
16-MAR-89	39.00	22.62	81.99	1.73	100%
20-MAR-89	59.67	3.50	130.90	1.16	100%
28-MAR-89	32.33	51.83	108.74	1.16	100%
31-MAR-89	32.33	9.99	88.11	2.31	100%
03-APR-89	35.00	21.67	111.80	2.00	100%
06-APR-89	24.83	11.76	61.36	4.86	100%
10-APR-89	27.17	5.29	78.17	0.58	100%
13-APR-89	42.17	12.63	110.27	2.75	100%
18-APR-89	30.33	10.84	95.75	0.58	100%
20-APR-89	28.67	13.51	93.84	2.52	100%
24-APR-89	16.33	20.03	41.49	4.04	100%
27-APR-89	2.73	1.59	7.99	0.50	20%

Table 1

PLASTIC LAKE SNOW CORES

PCST14

SAMPLING DATE	SNOW DEPTH (cm)		WATER EQUIVALENCE (mm)		PERCENT COVERAGE
	MEAN	S.D.	MEAN	S.D.	
22-JAN-88	33.83	32.10	78.94	3.62	100%
08-FEB-88	34.27	13.24	81.99	0.64	100%
22-FEB-88	61.00	21.30	137.02	3.46	100%
07-MAR-88	61.00	10.50	152.30	1.73	100%
14-MAR-88	24.58	13.76	172.93	1.67	100%
28-MAR-88	16.73	7.00	137.02	0.74	100%
30-MAR-88	15.73	23.08	137.78	1.44	100%
05-APR-88	5.18	3.86	41.11	0.04	67%
07-APR-88	1.05	2.19	6.13	0.19	33%
11-APR-88	1.21	1.58	5.87	0.19	33%
15-APR-88	0.14	0.50	0.36	0.10	8%
10-JAN-89	19.67	6.62	34.61	2.08	100%
24-JAN-89	32.33	6.06	62.89	3.51	100%
07-FEB-89	36.00	22.27	80.47	3.46	100%
21-FEB-89	60.00	11.31	96.51	4.36	100%
07-MAR-89	63.00	16.27	139.31	1.00	100%
16-MAR-89	55.67	21.70	97.66	2.52	100%
20-MAR-89	76.33	4.59	147.72	1.53	100%
28-MAR-89	49.00	22.50	130.14	1.00	100%
31-MAR-89	37.33	26.47	69.00	0.58	100%
03-APR-89	38.00	8.27	124.79	1.00	100%
06-APR-89	39.67	21.87	113.33	4.62	100%
10-APR-89	39.50	4.78	125.55	0.87	100%
13-APR-89	53.33	22.58	145.42	3.51	100%
18-APR-89	38.33	11.77	119.44	5.69	100%
20-APR-89	36.33	14.74	120.97	1.44	100%
24-APR-89	32.00	26.04	106.45	5.00	100%
27-APR-89	11.00	9.54	36.41	1.80	50%
01-MAY-89	1.85	1.39	6.22	0.23	15%

Table 2

PLASTIC LAKE SNOW CORES
PCST11

SAMPLING DATE	SNOW DEPTH (cm)		WATER EQUIVALENCE (mm)		PERCENT COVERAGE
	MEAN	S.D.	MEAN	S.D.	
22-JAN-88	36.00	26.47	95.75	7.94	100%
08-FEB-88	43.33	27.73	101.10	8.33	100%
22-FEB-88	69.67	16.10	167.59	10.60	100%
07-MAR-88	68.00	10.34	162.23	8.19	100%
14-MAR-88	28.37	30.33	186.69	3.69	100%
28-MAR-88	22.00	21.67	164.53	3.50	100%
30-MAR-88	20.00	16.90	163.00	3.08	100%
05-APR-88	9.98	6.52	72.86	1.99	67%
07-APR-88	6.61	11.73	53.40	1.46	67%
11-APR-88	2.48	12.50	16.22	0.97	33%
15-APR-88	1.25	1.90	5.12	0.33	33%
18-APR-88	0.74	5.20	4.53	0.58	10%
22-APR-88	0.75	6.45	5.30	0.69	10%
10-JAN-89	29.67	3.97	49.13	1.53	100%
24-JAN-89	45.33	6.62	82.76	2.52	100%
07-FEB-89	43.00	11.91	85.82	1.73	100%
21-FEB-89	65.67	30.44	117.15	8.74	100%
07-MAR-89	58.33	26.04	113.33	4.73	100%
16-MAR-89	60.00	20.55	101.10	0.00	100%
20-MAR-89	86.33	16.05	170.64	3.22	100%
28-MAR-89	55.67	24.26	136.25	1.53	100%
31-MAR-89	40.33	16.27	125.55	1.53	100%
03-APR-89	48.33	21.79	126.32	2.52	100%
06-APR-89	36.00	11.54	66.71	4.36	100%
10-APR-89	42.67	4.59	129.38	2.52	100%
13-APR-89	58.67	13.43	155.36	2.52	100%
18-APR-89	40.33	7.00	130.14	2.52	100%
20-APR-89	43.33	14.01	139.31	3.22	100%
24-APR-89	31.00	20.80	114.09	5.00	100%
27-APR-89	10.17	4.59	33.74	1.04	50%

Table 3

PLASTIC LAKE SNOW CORES
PCSZ07

SAMPLING DATE	SNOW DEPTH (cm)		WATER EQUIVALENCE (mm)		PERCENT COVERAGE
	MEAN	S.D.	MEAN	S.D.	
22-JAN-88	41.33	8.05	89.64	6.03	100%
08-FEB-88	48.43	17.51	103.39	7.26	100%
22-FEB-88	82.67	35.02	150.77	2.31	100%
07-MAR-88	71.67	18.67	192.80	8.62	100%
14-MAR-88	29.27	12.13	195.86	1.75	100%
28-MAR-88	21.77	23.82	166.06	1.33	100%
30-MAR-88	20.10	19.50	173.70	1.99	100%
05-APR-88	7.93	4.69	73.37	0.51	67%
07-APR-88	5.58	8.87	43.16	1.18	67%
11-APR-88	2.10	8.09	14.20	0.87	33%
15-APR-88	0.92	1.15	0.58	0.45	33%
18-APR-88	1.03	0.48	7.51	0.04	10%
22-APR-88	1.03	0.58	7.97	0.08	10%
10-JAN-89	25.67	8.05	43.79	2.52	100%
24-JAN-89	43.00	5.77	78.17	3.61	100%
07-FEB-89	50.33	5.77	93.46	8.33	100%
21-FEB-89	61.00	18.53	107.21	3.61	100%
07-MAR-89	68.33	13.44	133.20	7.37	100%
16-MAR-89	63.00	13.95	150.01	1.00	100%
20-MAR-89	81.00	14.32	186.69	3.46	100%
28-MAR-89	55.00	16.90	153.83	3.61	100%
31-MAR-89	49.00	2.30	147.72	2.00	100%
03-APR-89	49.67	1.32	163.00	1.16	100%
06-APR-89	42.67	16.27	125.55	1.04	100%
10-APR-89	46.00	10.50	152.30	3.12	100%
13-APR-89	53.33	25.53	113.33	12.34	100%
18-APR-89	44.00	13.24	143.89	2.00	100%
20-APR-89	42.00	9.27	153.83	2.78	100%
24-APR-89	32.33	7.37	107.98	1.16	100%
27-APR-89	13.50	3.36	47.68	0.50	50%
01-MAY-89	1.10	1.21	2.85	0.27	10%

Table 4

PLASTIC LAKE SNOW CORES
PCSZ05

SAMPLING DATE	SNOW DEPTH		WATER EQUIVALENCE		PERCENT COVERAGE
	MEAN (cm)	S.D.	MEAN (mm)	S.D.	
22-JAN-88	39.17	26.04	78.94	5.75	100%
08-FEB-88	49.33	3.97	108.74	6.11	100%
22-FEB-88	87.33	19.23	179.05	4.04	100%
07-MAR-88	77.67	26.44	191.28	7.64	100%
14-MAR-88	30.00	11.76	192.04	0.87	100%
28-MAR-88	24.33	12.63	173.70	1.07	100%
30-MAR-88	21.67	33.30	177.52	2.45	100%
05-APR-88	10.25	13.06	84.63	0.91	67%
07-APR-88	6.88	19.45	58.01	1.51	67%
11-APR-88	2.77	3.41	15.21	0.18	33%
15-APR-88	0.84	1.58	1.59	0.27	33%
18-APR-88	0.51	1.19	3.54	0.14	10%
22-APR-88	0.54	1.08	3.23	0.22	10%
10-JAN-89	35.00	5.77	59.07	3.46	100%
24-JAN-89	50.67	18.53	107.21	2.52	100%
07-FEB-89	60.33	9.17	122.50	5.86	100%
21-FEB-89	91.33	32.93	148.48	1.16	100%
07-MAR-89	75.67	19.23	159.95	1.53	100%
16-MAR-89	70.00	13.86	163.38	1.00	100%
20-MAR-89	89.67	6.88	188.98	8.08	100%
28-MAR-89	61.00	36.03	143.13	6.08	100%
31-MAR-89	57.17	8.27	177.52	3.01	100%
03-APR-89	57.00	28.67	192.04	3.61	100%
06-APR-89	46.67	23.27	147.71	5.03	100%
10-APR-89	45.33	6.07	150.01	1.26	100%
13-APR-89	65.67	12.62	165.29	3.22	100%
18-APR-89	53.33	8.27	170.64	3.22	100%
20-APR-89	45.67	15.88	143.13	2.31	100%
24-APR-89	42.33	17.51	141.60	3.06	100%
27-APR-89	15.00	8.03	52.08	0.50	50%
01-MAY-89	1.67	0.13	4.61	0.06	10%

Table 5

PLASTIC LAKE SNOW CORES
PCSZ04

SAMPLING DATE	SNOW DEPTH		WATER EQUIVALENCE		PERCENT COVERAGE
	MEAN	S.D.	MEAN	S.D.	
	(cm)		(mm)		
22-JAN-88	38.00	9.54	98.81	6.56	100%
08-FEB-88	42.83	16.58	98.04	10.75	100%
22-FEB-88	72.33	57.38	144.66	11.59	100%
07-MAR-88	69.33	46.82	168.35	10.79	100%
14-MAR-88	28.07	38.46	189.75	4.82	100%
28-MAR-88	16.67	23.08	137.02	2.26	100%
30-MAR-88	14.00	13.94	113.33	0.53	100%
05-APR-88	1.69	7.58	14.45	0.50	33%
07-APR-88	0.63	2.66	5.30	0.22	10%
10-JAN-89	24.33	6.07	37.67	2.52	100%
24-JAN-89	31.33	15.61	43.02	1.53	100%
07-FEB-89	31.00	15.60	75.12	5.29	100%
21-FEB-89	49.00	3.50	86.58	4.36	100%
07-MAR-89	49.33	27.35	117.15	0.58	100%
16-MAR-89	39.33	10.83	94.22	1.53	100%
20-MAR-89	57.00	18.67	146.95	2.00	100%
28-MAR-89	31.67	25.77	94.22	6.43	100%
31-MAR-89	26.83	17.21	71.30	1.04	100%
03-APR-89	28.33	9.17	101.86	2.08	100%
06-APR-89	23.00	7.37	68.24	2.00	100%
10-APR-89	23.83	5.77	71.30	0.76	100%
13-APR-89	48.67	21.01	106.45	1.16	100%
18-APR-89	18.67	7.00	48.37	3.06	100%
20-APR-89	11.17	4.77	26.97	3.51	100%
24-APR-89	25.67	7.94	85.82	1.53	100%
27-APR-89	1.53	3.56	5.93	0.50	20%

Table 6

HARP LAKE SNOW CORES
HPST16

SAMPLING DATE	SNOW DEPTH (cm)		WATER EQUIVALENCE (mm)		PERCENT COVERAGE
	MEAN	S.D.	MEAN	S.D.	
21-JAN-88	37.50	15.61	82.76	6.80	100%
09-FEB-88	43.33	5.77	110.27	6.51	100%
23-FEB-88	80.33	13.04	185.16	7.85	100%
08-MAR-88	30.17	27.64	201.21	3.82	100%
15-MAR-88	31.97	12.77	216.49	2.30	100%
29-MAR-88	25.07	22.62	227.19	3.04	100%
31-MAR-88	23.17	23.19	205.80	2.06	100%
06-APR-88	14.10	28.85	128.61	2.88	100%
08-APR-88	11.90	34.24	94.99	2.27	100%
12-APR-88	4.85	30.68	42.14	2.70	67%
14-APR-88	0.97	3.49	6.13	0.39	33%
19-APR-88	0.67	0.53	3.92	0.07	10%
21-APR-88	0.65	0.53	3.23	0.08	10%
09-JAN-89	30.67	4.59	42.26	3.22	100%
23-JAN-89	47.33	11.31	101.10	4.62	100%
06-FEB-89	56.33	8.68	120.97	1.16	100%
20-FEB-89	72.33	17.81	148.48	9.02	100%
06-MAR-89	74.67	12.77	172.94	6.66	100%
16-MAR-89	65.00	24.26	175.23	8.19	100%
21-MAR-89	85.33	11.31	211.14	3.22	100%
28-MAR-89	53.00	39.33	166.82	7.21	100%
30-MAR-89	35.33	25.53	111.03	3.22	100%
03-APR-89	39.33	14.01	137.78	4.16	100%
06-APR-89	44.33	35.62	127.85	1.53	100%
10-APR-89	24.83	3.97	58.31	2.26	100%
13-APR-89	54.00	23.94	152.30	4.77	100%
17-APR-89	42.00	10.34	137.78	2.65	100%
21-APR-89	37.00	8.05	121.74	2.65	100%
24-APR-89	33.67	9.27	101.10	3.51	100%
27-APR-89	8.83	1.98	28.01	2.26	50%
01-MAY-89	0.78	0.57	2.42	0.06	5%

Table 7

HARP LAKE SNOW CORES
HPST14

SAMPLING DATE	SNOW DEPTH		WATER EQUIVALENCE		PERCENT COVERAGE
	MEAN	S.D.	MEAN	S.D.	
	(cm)		(mm)		
21-JAN-88	38.00	9.17	94.99	4.36	100%
09-FEB-88	43.00	8.05	94.22	1.73	100%
23-FEB-88	83.33	14.74	180.58	2.52	100%
08-MAR-88	32.33	1.32	204.27	0.76	100%
15-MAR-88	34.63	8.05	242.48	0.58	100%
29-MAR-88	25.33	15.27	212.67	0.35	100%
31-MAR-88	23.07	5.77	198.92	0.12	100%
06-APR-88	13.33	7.00	114.09	0.76	100%
08-APR-88	11.43	8.26	85.82	1.36	100%
12-APR-88	4.42	3.55	36.51	0.44	67%
14-APR-88	1.00	1.58	6.88	0.22	33%
19-APR-88	0.73	1.50	4.23	0.16	10%
21-APR-88	0.91	0.87	5.07	0.10	10%
09-JAN-89	37.00	9.54	43.79	3.00	100%
23-JAN-89	53.67	3.97	117.91	2.08	100%
06-FEB-89	59.67	7.00	111.80	0.58	100%
20-FEB-89	87.67	6.62	167.58	6.51	100%
06-MAR-89	85.00	31.13	176.76	1.00	100%
16-MAR-89	71.33	24.51	195.10	1.53	100%
21-MAR-89	89.00	4.77	227.19	1.73	100%
28-MAR-89	64.00	10.84	192.04	5.29	100%
30-MAR-89	60.33	23.86	183.64	1.53	100%
03-APR-89	53.67	36.56	162.23	1.53	100%
06-APR-89	54.00	21.01	161.47	2.00	100%
10-APR-89	48.67	18.20	131.67	0.58	100%
13-APR-89	56.50	15.88	150.01	0.87	100%
17-APR-89	44.33	23.08	128.61	2.89	100%
21-APR-89	40.00	4.59	140.84	1.00	100%
24-APR-89	33.00	6.62	114.85	2.65	100%
27-APR-89	6.17	3.50	18.07	0.58	50%
01-MAY-89	0.22	0.16	0.65	0.02	1%

Table 8

HARP LAKE SNOW CORES
HPST13

SAMPLING DATE	SNOW DEPTH		WATER EQUIVALENCE		PERCENT COVERAGE
	MEAN (cm)	S.D.	MEAN (mm)	S.D.	
21-JAN-88	36.33	2.30	92.69	1.44	100%
09-FEB-88	39.83	2.30	94.99	3.33	100%
23-FEB-88	73.67	12.97	161.47	3.06	100%
08-MAR-88	27.00	2.64	171.40	1.32	100%
15-MAR-88	27.87	23.19	183.63	2.51	100%
29-MAR-88	19.23	9.27	166.82	1.44	100%
31-MAR-88	15.97	12.63	134.72	1.75	100%
06-APR-88	0.94	4.37	6.13	0.45	33%
08-APR-88	0.46	1.51	1.08	0.03	33%
09-JAN-89	25.33	10.59	36.90	3.33	100%
23-JAN-89	37.33	0.00	76.65	0.58	100%
06-FEB-89	39.33	6.62	61.36	0.58	100%
20-FEB-89	67.33	12.77	115.62	2.31	100%
06-MAR-89	67.33	27.16	142.37	1.53	100%
16-MAR-89	55.00	16.05	127.08	2.00	100%
21-MAR-89	78.00	7.01	185.16	4.36	100%
28-MAR-89	40.33	6.06	104.15	4.04	100%
30-MAR-89	31.17	12.13	90.40	0.76	100%
03-APR-89	29.67	10.50	90.40	1.16	100%
06-APR-89	25.33	8.68	78.17	1.53	100%
10-APR-89	25.33	5.77	65.95	1.16	100%
13-APR-89	34.50	6.07	74.35	4.27	100%
17-APR-89	17.33	5.77	55.25	1.16	100%
21-APR-89	13.00	7.37	32.32	3.00	100%
24-APR-89	10.67	6.06	23.91	1.16	100%

Table 9

HARP LAKE SNOW CORES
HPSZ07

SAMPLING DATE	SNOW DEPTH		WATER EQUIVALENCE		PERCENT COVERAGE
	MEAN	S.D.	MEAN	S.D.	
	(cm)		(mm)		
21-JAN-88	42.67	6.06	97.28	3.22	100%
09-FEB-88	48.33	16.90	107.98	4.51	100%
23-FEB-88	85.67	8.68	185.16	4.04	100%
08-MAR-88	32.67	5.29	219.55	1.89	100%
15-MAR-88	33.67	15.89	216.49	1.13	100%
29-MAR-88	24.03	25.77	211.14	0.93	100%
31-MAR-88	22.93	41.27	205.03	1.83	100%
06-APR-88	9.87	25.22	83.52	3.42	100%
08-APR-88	6.07	28.85	40.73	3.10	100%
12-APR-88	2.75	7.68	20.63	0.37	67%
14-APR-88	0.95	1.90	4.61	0.27	33%
19-APR-88	0.81	1.50	5.14	0.16	10%
21-APR-88	0.84	1.08	4.76	0.08	10%
09-JAN-89	35.67	4.77	46.08	1.16	100%
23-JAN-89	52.33	1.33	111.80	2.52	100%
06-FEB-89	65.00	22.11	117.91	3.00	100%
20-FEB-89	88.00	32.34	159.18	5.00	100%
06-MAR-89	67.00	89.16	198.92	10.58	100%
16-MAR-89	74.67	13.95	177.52	1.53	100%
21-MAR-89	86.67	11.77	192.80	6.11	100%
28-MAR-89	63.33	24.26	188.98	1.53	100%
30-MAR-89	45.00	6.62	153.07	4.00	100%
03-APR-89	61.33	10.34	187.45	2.08	100%
06-APR-89	54.17	16.90	153.83	6.60	100%
10-APR-89	54.33	34.03	197.39	6.03	100%
13-APR-89	57.50	23.19	162.24	3.91	100%
17-APR-89	45.00	37.88	159.18	6.93	100%
21-APR-89	43.33	4.59	154.59	4.04	100%
24-APR-89	31.67	13.04	102.63	3.22	100%
27-APR-89	6.00	3.03	22.28	0.43	50%
01-MAY-89	0.28	0.05	0.80	0.02	2%

Table 10

HARP LAKE SNOW CORES
HPSZ06

SAMPLING DATE	SNOW DEPTH (cm)		WATER EQUIVALENCE (mm)		PERCENT COVERAGE
	MEAN	S.D.	MEAN	S.D.	
21-JAN-88	32.50	13.82	80.47	3.00	100%
09-FEB-88	38.00	11.47	92.69	1.73	100%
23-FEB-88	71.33	6.88	166.06	4.93	100%
08-MAR-88	26.00	12.63	173.70	0.87	100%
15-MAR-88	28.03	49.01	227.96	1.44	100%
29-MAR-88	17.50	13.04	141.60	1.04	100%
31-MAR-88	12.53	14.56	107.98	1.36	100%
06-APR-88	0.34	0.13	2.32	0.01	10%
09-JAN-89	25.50	7.94	33.09	2.18	100%
23-JAN-89	43.67	11.31	87.34	2.08	100%
06-FEB-89	46.33	4.77	80.47	3.22	100%
20-FEB-89	74.67	14.92	140.07	3.51	100%
06-MAR-89	71.67	16.58	159.94	4.93	100%
16-MAR-89	58.67	21.01	147.72	3.79	100%
21-MAR-89	75.67	6.88	182.11	2.08	100%
28-MAR-89	47.33	24.80	166.06	3.79	100%
30-MAR-89	40.67	6.62	114.85	2.52	100%
03-APR-89	36.33	53.39	132.43	1.16	100%
06-APR-89	22.17	11.47	65.18	1.04	100%
10-APR-89	47.67	6.06	131.67	1.53	100%
13-APR-89	41.33	29.03	111.80	7.10	100%
17-APR-89	21.67	10.83	62.12	4.62	100%
21-APR-89	7.00	10.83	13.22	3.00	100%

Table 11

HARP LAKE SNOW CORES
HPSZ04

SAMPLING DATE	SNOW DEPTH MEAN (cm)	SNOW DEPTH S.D. (cm)	WATER EQUIVALENCE MEAN (mm)	WATER EQUIVALENCE S.D. (mm)	PERCENT COVERAGE
21-JAN-88	39.33	7.37	94.22	2.31	100%
09-FEB-88	41.00	15.27	91.17	3.61	100%
23-FEB-88	79.83	17.81	169.88	2.75	100%
08-MAR-88	30.00	9.27	188.22	2.18	100%
15-MAR-88	32.20	22.11	205.03	2.87	100%
29-MAR-88	22.30	12.13	166.06	0.61	100%
31-MAR-88	16.57	14.56	153.06	1.89	100%
06-APR-88	8.77	19.50	71.30	1.60	100%
08-APR-88	3.62	9.39	22.68	0.91	67%
12-APR-88	0.22	0.61	1.25	0.05	10%
09-JAN-89	30.00	5.74	36.52	4.50	100%
23-JAN-89	42.83	3.50	80.47	2.93	100%
06-FEB-89	35.67	9.17	65.18	6.11	100%
20-FEB-89	59.33	19.50	121.73	7.77	100%
06-MAR-89	63.33	9.17	140.84	5.13	100%
16-MAR-89	50.67	25.26	125.55	5.03	100%
21-MAR-89	70.67	25.36	166.82	5.86	100%
28-MAR-89	38.33	21.01	140.84	4.93	100%
30-MAR-89	36.33	19.86	111.04	1.16	100%
03-APR-89	34.67	3.50	120.97	2.31	100%
06-APR-89	29.50	2.65	86.58	0.50	100%
10-APR-89	27.50	4.77	75.88	2.29	100%
13-APR-89	42.83	5.77	93.46	2.02	100%
17-APR-89	23.00	9.99	67.47	2.00	100%
21-APR-89	14.50	1.32	43.02	0.50	100%
24-APR-89	18.00	7.01	36.14	1.00	100%

Table 12

HAWKEYE LAKE SNOW CORES
HKSBW

SAMPLING DATE	SNOW DEPTH MEAN (cm)	SNOW DEPTH S.D. (cm)	WATER EQUIVALENCE MEAN (mm)	WATER EQUIVALENCE S.D. (mm)	PERCENT COVERAGE
01-MAR-88	42.67	2.02	73.27	1.53	100%
15-MAR-88	49.80	13.76	69.87	2.25	100%
28-MAR-88	48.13	21.93	105.74	2.69	100%
05-APR-88	29.50	13.07	81.10	1.90	100%
13-APR-88	17.13	11.80	43.01	2.60	100%
18-APR-88	12.73	6.79	31.93	1.42	100%
03-NOV-88	8.23	1.78	14.46	0.59	100%
10-NOV-88	16.87	8.57	32.90	2.34	100%
25-NOV-88	15.00	8.39	30.49	0.50	100%
02-DEC-88	23.03	3.94	47.02	3.40	100%
09-DEC-88	20.40	2.75	44.64	0.50	100%
06-JAN-89	48.43	6.97	84.14	2.93	100%
20-JAN-89	61.90	6.13	120.74	2.74	100%
03-FEB-89	57.20	3.02	111.31	3.12	100%
16-FEB-89	52.17	21.01	98.86	2.77	100%
03-MAR-89	62.57	14.22	131.58	2.25	100%
17-MAR-89	55.57	7.81	122.97	1.36	100%
31-MAR-89	56.13	10.66	158.90	1.14	100%
06-APR-89	50.67	8.32	169.09	0.50	100%
11-APR-89	62.87	9.34	181.48	2.22	100%
14-APR-89	63.73	16.49	174.96	2.97	100%
18-APR-89	44.93	16.15	135.58	4.57	100%
21-APR-89	44.60	21.87	146.89	5.80	100%
25-APR-89	33.70	35.89	109.31	4.94	100%
29-APR-89	21.37	6.82	64.14	2.70	100%

Table 13

HAWKEYE LAKE SNOW CORES
HKSFB

SAMPLING DATE	SNOW DEPTH MEAN (cm)	SNOW DEPTH S.D. (cm)	WATER EQUIVALENCE MEAN (mm)	WATER EQUIVALENCE S.D. (mm)	PERCENT COVERAGE
01-MAR-88	39.00	3.05	67.57	0.85	100%
15-MAR-88	44.03	22.63	62.69	5.20	100%
28-MAR-88	42.77	13.70	94.85	0.55	100%
05-APR-88	30.17	20.98	73.97	0.76	100%
13-APR-88	10.37	4.40	19.91	1.72	100%
18-APR-88	19.17	5.37	43.02	1.61	100%
03-NOV-88	6.30	0.94	10.16	0.78	100%
10-NOV-88	16.00	0.89	27.52	1.20	100%
25-NOV-88	14.17	2.02	30.27	1.04	100%
02-DEC-88	20.17	4.61	39.06	1.61	100%
09-DEC-88	16.23	4.07	33.79	2.66	100%
06-JAN-89	35.80	7.02	57.93	5.27	100%
20-JAN-89	55.37	5.07	99.35	2.15	100%
03-FEB-89	51.90	5.63	100.92	2.21	100%
16-FEB-89	56.70	15.51	114.98	0.00	100%
03-MAR-89	57.47	11.41	111.21	4.27	100%
17-MAR-89	60.43	1.34	128.14	1.21	100%
31-MAR-89	57.03	13.82	135.18	2.02	100%
06-APR-89	45.83	8.27	124.80	2.28	100%
11-APR-89	44.03	20.07	128.38	3.41	100%
14-APR-89	38.90	14.93	133.74	3.05	100%
18-APR-89	37.43	18.78	114.32	3.33	100%
21-APR-89	34.93	5.35	114.41	1.68	100%
25-APR-89	15.13	5.26	45.65	1.10	100%
29-APR-89	16.93	7.64	36.51	1.89	100%

Table 14

HAWKEYE LAKE SNOW CORES
HKSPO

SAMPLING DATE	SNOW DEPTH MEAN (cm)	SNOW DEPTH S.D. (cm)	WATER EQUIVALENCE MEAN (mm)	WATER EQUIVALENCE S.D. (mm)	PERCENT COVERAGE
01-MAR-88	44.27	2.50	67.82	1.30	100%
16-MAR-88	53.67	7.80	97.61	2.84	100%
28-MAR-88	47.73	8.20	106.24	2.00	100%
05-APR-88	36.07	20.43	96.16	1.50	100%
13-APR-88	11.20	8.61	31.36	3.12	100%
18-APR-88	12.50	3.98	31.53	1.80	100%
03-NOV-88	7.63	0.50	14.19	0.45	100%
10-NOV-88	16.67	5.61	28.58	0.76	100%
25-NOV-88	17.00	2.44	41.28	3.46	100%
02-DEC-88	20.30	3.44	38.94	1.42	100%
09-DEC-88	19.93	6.56	37.89	0.29	100%
06-JAN-89	49.47	4.18	86.51	0.85	100%
20-JAN-89	61.67	4.30	109.57	2.19	100%
03-FEB-89	59.43	6.14	127.30	1.11	100%
16-FEB-89	62.33	15.26	129.17	0.91	100%
03-MAR-89	65.30	10.46	130.57	1.02	100%
17-MAR-89	65.07	11.63	136.31	2.16	100%
31-MAR-89	66.07	9.22	144.43	3.49	100%
06-APR-89	50.20	15.98	166.10	4.85	100%
11-APR-89	61.53	11.36	136.12	1.89	100%
14-APR-89	53.10	5.34	140.94	2.72	100%
18-APR-89	47.07	15.23	154.23	4.09	100%
21-APR-89	39.50	6.97	139.53	0.89	100%
25-APR-89	32.30	3.51	103.85	3.42	100%
29-APR-89	22.57	18.08	70.32	3.37	100%
05-MAY-89	14.40	7.57	20.96	3.62	100%

Table 15

HAWKEYE LAKE SNOW CORES
HKSPW

SAMPLING DATE	SNOW DEPTH (cm)		WATER EQUIVALENCE (mm)		PERCENT COVERAGE
	MEAN	S.D.	MEAN	S.D.	
01-MAR-88	35.67	2.47	59.64	2.08	100%
16-MAR-88	42.83	16.16	69.91	1.61	100%
28-MAR-88	34.67	7.23	78.87	0.58	100%
05-APR-88	28.38	31.51	83.25	0.85	100%
03-NOV-88	4.57	0.74	10.22	0.93	100%
10-NOV-88	10.50	2.57	19.99	0.27	100%
25-NOV-88	11.00	8.37	28.41	0.50	100%
02-DEC-88	16.67	1.14	32.43	2.02	100%
09-DEC-88	17.27	3.63	40.77	0.47	100%
06-JAN-89	38.27	7.15	55.92	0.91	100%
20-JAN-89	45.50	20.80	91.21	4.33	100%
03-FEB-89	51.53	13.02	78.59	2.39	100%
16-FEB-89	48.17	8.13	84.61	0.38	100%
03-MAR-89	46.47	21.21	89.64	1.50	100%
17-MAR-89	57.33	5.55	110.84	0.64	100%
31-MAR-89	43.10	5.01	107.98	1.85	100%
06-APR-89	35.73	4.78	116.90	0.95	100%
11-APR-89	37.87	6.14	102.23	1.42	100%
14-APR-89	33.03	7.33	104.61	1.27	100%
18-APR-89	31.30	22.06	77.27	5.26	100%
21-APR-89	21.57	9.68	86.10	3.42	100%
25-APR-89	15.87	3.90	48.07	1.70	100%

Table 16

HAWKEYE LAKE SNOW CORES
HKSSB

SAMPLING DATE	SNOW DEPTH MEAN (cm)	SNOW DEPTH S.D. (cm)	WATER EQUIVALENCE MEAN (mm)	WATER EQUIVALENCE S.D. (mm)	PERCENT COVERAGE
01-MAR-88	34.00	6.48	38.42	5.29	100%
15-MAR-88	55.93	6.33	86.50	6.65	100%
28-MAR-88	50.00	18.77	82.80	3.46	100%
05-APR-88	43.63	15.07	80.15	1.32	100%
13-APR-88	26.57	20.22	55.51	4.48	100%
18-APR-88	22.83	7.26	43.64	0.76	100%
25-APR-88	9.83	11.47	32.53	6.93	100%
03-NOV-88	9.20	3.03	14.05	1.02	100%
10-NOV-88	18.03	4.20	31.50	2.14	100%
25-NOV-88	29.50	2.12	48.42	2.78	100%
02-DEC-88	26.33	11.00	58.50	1.34	100%
09-DEC-88	29.07	16.23	52.65	1.10	100%
06-JAN-89	53.77	1.80	80.19	6.88	100%
20-JAN-89	65.57	24.84	120.31	7.73	100%
03-FEB-89	55.23	5.50	94.50	6.42	100%
16-FEB-89	64.40	13.95	127.90	7.18	100%
03-MAR-89	64.30	5.01	137.84	5.05	100%
17-MAR-89	73.80	20.80	149.40	4.72	100%
31-MAR-89	73.53	25.27	216.87	2.73	100%
06-APR-89	77.33	16.39	181.34	2.65	100%
11-APR-89	82.70	3.92	212.76	1.49	100%
14-APR-89	72.33	28.08	226.83	1.85	100%
18-APR-89	64.37	9.80	208.16	1.60	100%
21-APR-89	61.30	4.06	203.63	0.30	100%
25-APR-89	53.87	13.78	186.83	2.55	100%
29-APR-89	40.73	20.00	123.86	2.37	100%
05-MAY-89	27.53	30.25	78.82	1.51	100%
10-MAY-89	29.63	36.52	93.02	3.68	100%
12-MAY-89	21.23	1.09	57.60	4.66	100%

Table 17

TD   Findeis, J.G. et al
888   Biogeochemistry project:
P8   snow cores 1988-1989 Plastic
F56   Lake, Harp Lake, Hawkeye Lake
MOE   (Data report 89/1)

1989

Date	Issued To
MAR - 7 1990	✓ H. VANDERMEULEN - WRR

LABORATORY & RESEARCH LIBRARY
MINISTRY OF THE ENVIRONMENT